

# Microsoft Dynamics CRM 2011 Walkthrough

*Part 2: Solution &  
system management*

Jukka Niiranen

<http://niiranen.eu/crm>

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## *Walkthrough Part 1*

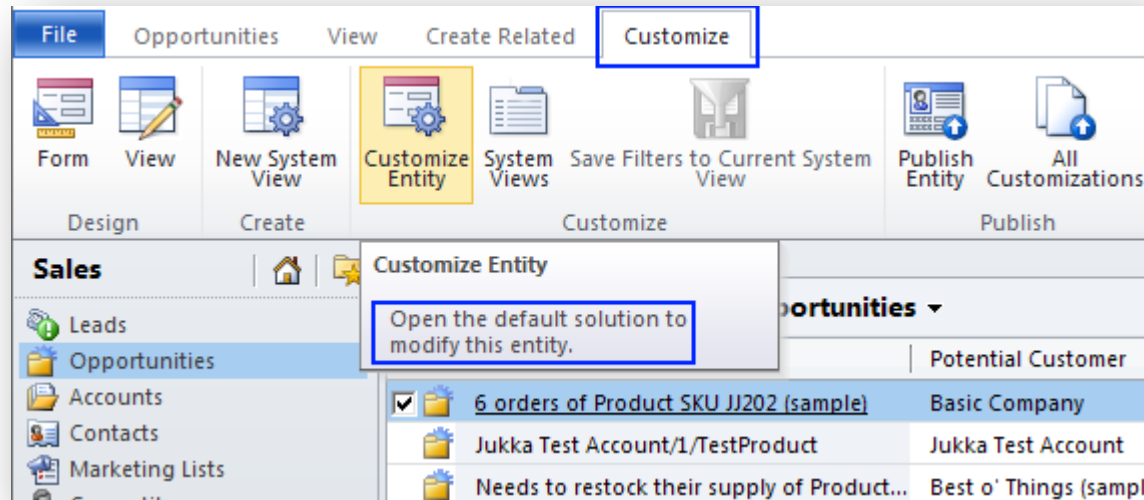
- End-user tools and UI enhancements
- Outlook client
- Form customization options
- Auditing
- Connections
- SharePoint integration
- Visualizations
- Goals

## *Walkthrough Part 2*

- Customization menus
- UI customization options
- Solution management
- Web resources
- Processes (workflows)
- Custom activities
- Queue enhancements
- Multiple forms per entity
- Security features
- Cloud services
- Upgrading from CRM 4.0
- What's not there in 2011

# Customization Menus

# Ribbon access to Customizations



- Administrators now have direct access to entity, form and view customizations from the main window or detail form of a record
- Note: these shortcuts will always take you to the default solution, access to settings menu is needed for selecting which solution is to be customized

# Hierarchical navigation

Solution components can be accessed from the hierarchical menu, thus reducing pop-up windows in the customization screen

The screenshot displays the 'Account' entity configuration in Microsoft Dynamics CRM 2011. On the left, a hierarchical menu under 'Solution: Demo Solution' shows the path: Information > Components > Entities > Account. The 'Account' entity is selected, and a callout points to it from the text box on the left. The main area shows the 'Primary Field' tab for the 'Entity Definition'.

**Entity Definition**

Display Name \*: Account Ownership \*: User or Te

Plural Name \*: Accounts ☐ Define as an activity entity.

Name \*: account ☐ Display in Activity Menus

Description: Business that represents a customer or potential customer. The company that is billed in business transactions.

**Areas that display this entity**

☒ Workplace ☒ Sales ☒ Marketing ☒ Service

☐ Settings ☐ Resource Center

**Options for Entity**

Select an option to enable the feature for this entity. After you enable these options, they can never be disabled.

☒ Note (includes attachments)

☒ Activities

☒ Sending e-mail (If an e-mail field does not exist, one will be created)

☐ Queues

☐ Automatically move records to the owner's default queue when a record is created or assigned.

# Drag & drop form editing

Field Explorer lists available fields and allows creation of new attributes

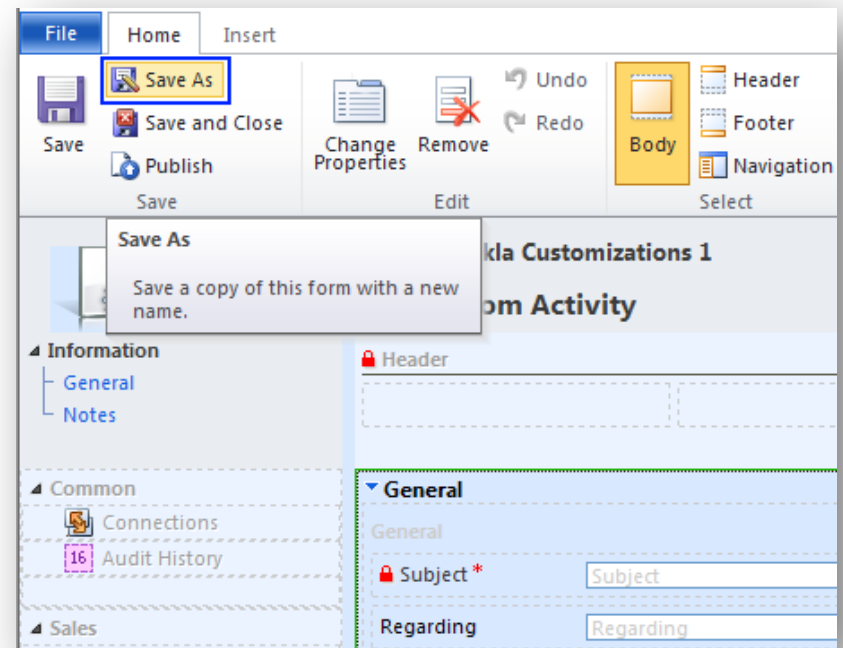
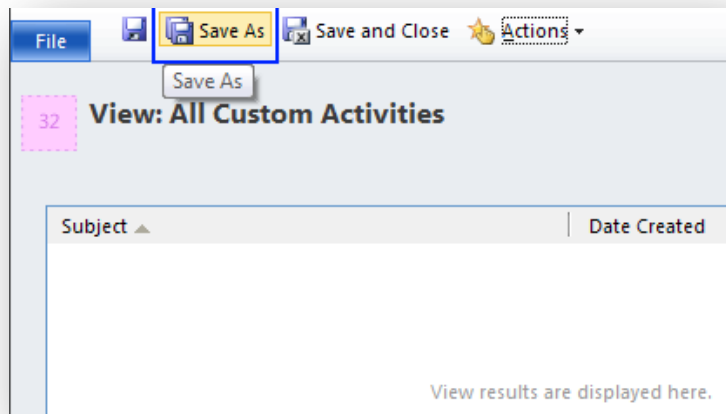
Drag fields directly to the form

Arrange fields by dragging, remove by pressing Delete

The screenshot displays the Microsoft Dynamics CRM 2011 Form Editor for a form titled "Form Account". On the left, the "Field Explorer" pane lists available fields, including "E-mail Address 2", "E-mail Address 3", "Exchange Rate", "FTP Site", "Market Capitalization", "Market Capitalization (Base)", "Modified By", "Modified By (Delegate)", "Modified On", "Shares Outstanding", and "Shipping Method". The "Modified By" field is highlighted with a blue border. On the right, the form layout is shown with sections: "Header" (containing "Business Type" and "Classification"), "General" (containing "Account Information" with fields like "Account Name", "Account Number", "Parent Account", "Primary Contact", "Relationship Type", "Currency", "Main Phone", "Other Phone", "Fax", "Web Site", "E-mail"), and "Address" (containing "Address Name" and "ZIP/Postal Code"). A "Modified By" field is being dragged from the Field Explorer to the "General" section of the form, as indicated by a blue border around the field in the form layout.

# Save As -options

- Available for views, forms, charts
- Quick way to replicate existing configurations when adding new views and forms



# UI customization options



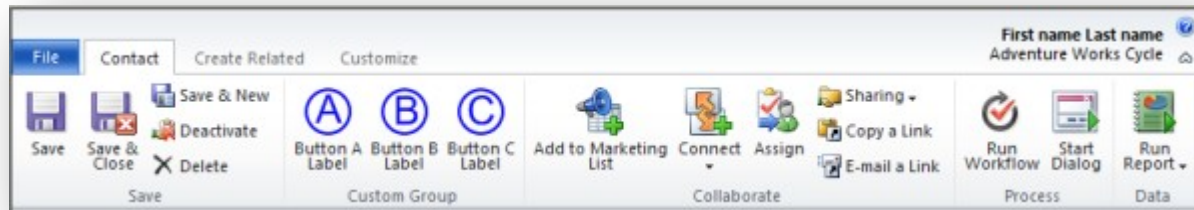
# Ribbon customization

- Create custom sections and buttons to ribbons
- Default ribbon elements can be hidden or overwritten with custom elements
- No GUI editor, modifications done through XML:
  - Export the solution customizations
  - Edit the RibbonDiffXml
  - Create Web Resources for icons and scripts
  - Import solution
- Outlook 2003 and 2007 will display ribbon elements as menus, Outlook 2010 has full ribbon

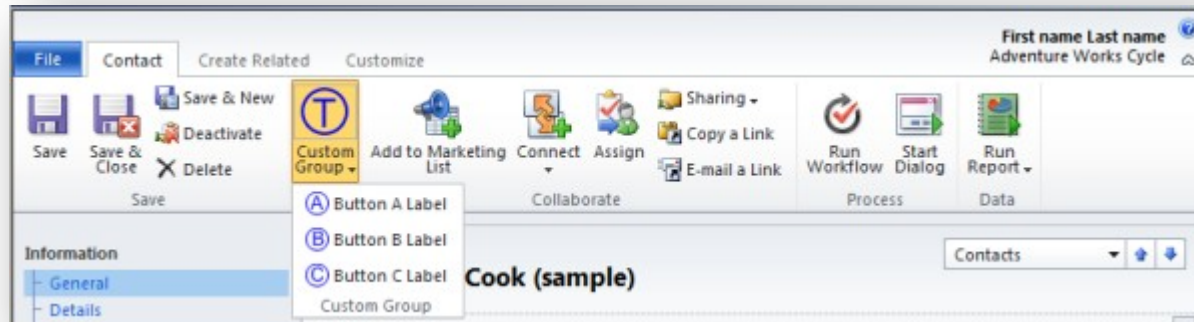
# Ribbon features

- Ribbon types available:
  - Entity ribbons: form, grid, subgrid
  - Web app specific: jewel ("File"), basic home tab
  - Others: dashboard, advanced find, form editor...
- Ribbon element display & enable criteria:
  - Client type, field value, form state, record privilege, grid selection count, custom rules for Javascript libraries
- Ribbon control actions:
  - Open a URL, pass parameters, call Javascript function
- Ribbon element size and scaling priority order

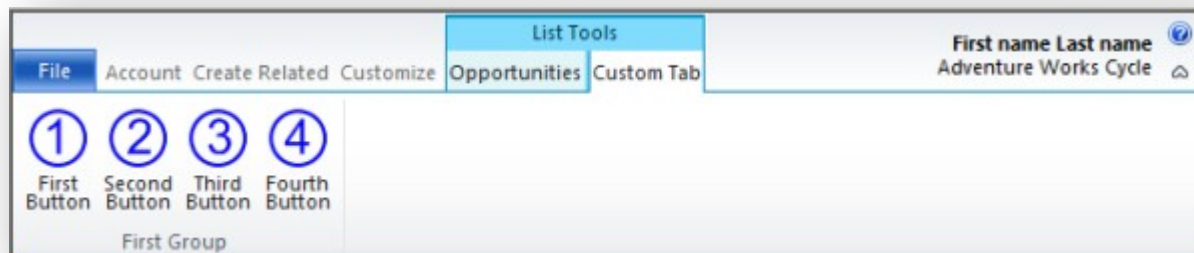
# Examples of custom ribbon elements



Custom group and buttons in default layout

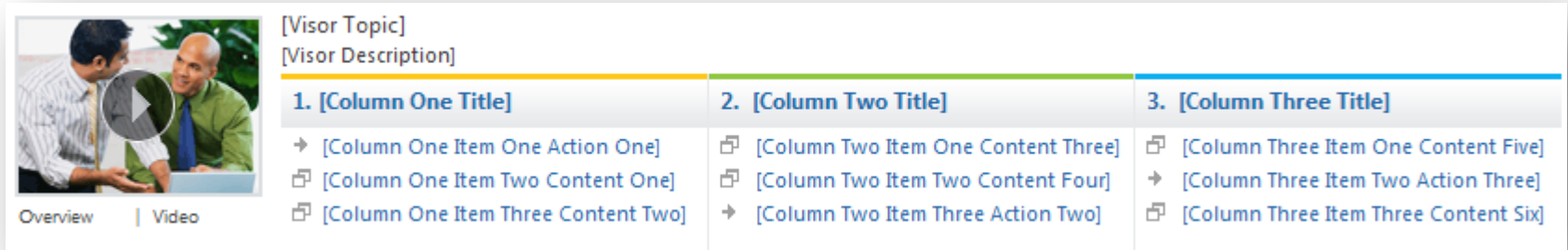


Custom group with popup button layout



Custom group in subgrid ribbon list tools

# Getting Started Pane



The screenshot displays the 'Getting Started Pane' interface. On the left, there is a video thumbnail with a play button icon and the text 'Overview | Video'. To the right of the video, the pane is titled '[Visor Topic]' and '[Visor Description]'. The main content area is organized into three columns, each with a title and a list of items. Column 1 is titled '1. [Column One Title]' and contains three items: '[Column One Item One Action One]', '[Column One Item Two Content One]', and '[Column One Item Three Content Two]'. Column 2 is titled '2. [Column Two Title]' and contains three items: '[Column Two Item One Content Three]', '[Column Two Item Two Content Four]', and '[Column Two Item Three Action Two]'. Column 3 is titled '3. [Column Three Title]' and contains three items: '[Column Three Item One Content Five]', '[Column Three Item Two Action Three]', and '[Column Three Item Three Content Six]'. Each item is preceded by a small icon (either a right-pointing arrow or a document icon).

| 1. [Column One Title]                 | 2. [Column Two Title]                 | 3. [Column Three Title]                 |
|---------------------------------------|---------------------------------------|---|
| → [Column One Item One Action One]    | 📄 [Column Two Item One Content Three] | 📄 [Column Three Item One Content Five]  |
| 📄 [Column One Item Two Content One]   | 📄 [Column Two Item Two Content Four]  | → [Column Three Item Two Action Three]  |
| 📄 [Column One Item Three Content Two] | → [Column Two Item Three Action Two]  | 📄 [Column Three Item Three Content Six] |

- Getting Started Pane is available for all entities that have viewable grids in CRM UI
- Allows presenting relevant instructions on the context of the entity being viewed
- Supports HTML and Silverlight content
- Users can show/hide the pane per entity or set global preferences through Options menu
- SDK contains HelpVisorTemplate that can be used as a customization starting point for own panes

# Performance with CSS sprites

- CSS sprites reduce the HTTP calls to web server, thus improving performance in WAN environment
- One image file is used to render several icons by showing only a specific region of the main sprite
- Dynamics CRM 2011 utilizes sprites like ribbon.png to load and cache all default icons
- Note: Custom icons will have a higher payload and may affect page loading times



# Solution Management

# Not just customizations

- In CRM 4.0, customizations and other configuration items were managed independently from one another
- In CRM 2011, solutions are bundles of components that are used for delivering specific applications/functionalities
- Each CRM organization has one default solution, in addition to which it can have multiple different solutions from different publishers

# Solution components

- Schema and metadata components
  - Entities, attributes, forms, views, charts, relationships, option sets
- User interface components
  - Web resources, ribbons, sitemap, dashboards
- Code components
  - Processes, dialogs, plug-ins, custom WF activities
    - Plug-in registration is also stored in the solution
- System configuration components
  - Templates, security roles, reports, settings
    - Users and teams not included, roles need to be manually configured after solution installation



# Customizing solutions in CRM

The screenshot shows the Microsoft Dynamics CRM 2011 Solution Editor interface. The top menu bar includes options like New, Import, Export, Import Translations, Export Translations, Publish All Customizations, and Get Solutions from Marketplace. Below the menu is a table listing solutions, with 'DemoSolution' selected. The left sidebar shows a tree view of components, with 'Components' expanded. The main area displays the 'Add Existing' dropdown menu, which lists various component types such as Entity, Option Set, Site Map, Application Ribbons, Web Resource, Process, Plug-in Assembly, Sdk Message Processing Step, Service Endpoint, Dashboard, Report, Connection Role, Article Template, and Contract Template. A yellow callout bubble points to the 'Add Existing' button with the text 'Add existing or new components to solution'.

**Solutions: All Solutions**

| Name   | Display Name  | Version | Installed On | Package Type | Publisher         | Description                        |
|--|---------------|---------|--------------|--------------|-------------------|------------------------------------|
| <input checked="" type="checkbox"/> DemoSolution | Demo Solution | 1.0.1.1 | 3.10.2010    | Unmanaged    | CRM Testers, Inc. | Solution created for demonstration |

**Solution: DemoSolution - Microsoft Dynamics CRM - Windows Internet Explorer**

**Solution: DemoSolution Information**

**Component Type** All

**Add Existing** (highlighted)

**Entity** (selected in dropdown)

| Name            | Type         | State     |
|-----------------|--------------|-----------|
| Entity          | Entity       | Managed   |
| dashboard 1     | Dashboard    | Unmanaged |
| play_icon_32    | Web Resource | Unmanaged |
| level           | Entity       | Managed   |
| uctpricelevel   | Entity       | Managed   |
| bingMaps        | Web Resource | Unmanaged |
| GoogleMaps      | Web Resource | Unmanaged |
| testWebResource | Web Resource | Unmanaged |

# Unmanaged / managed solutions

- You can only create unmanaged solutions
- Upon export you can choose to make the solution either unmanaged or managed
- Managed solutions are locked from editing
- Managed solutions each have their own “layer”, which will control adding and removing solutions to/from a system
- Unmanaged solutions cannot be uninstalled
  - Only pointers to components, not separate containers
  - You can delete the solution, but components will not be deleted from the system

# Exporting a solution

Including system settings  
in the solution

## Export System Settings (Advanced)



Select the following features if you want their system settings to be applied when the solution is imported. Note that the system settings are not removed if the solution is deleted. Consult your system administrator before including system settings in your solution. For more information, click the Help icon.

### Settings

- ☐ Auto-numbering
- ☐ Calendar
- ☐ Customization
- ☐ E-mail tracking
- ☐ General
- ☐ Marketing
- ☐ Outlook Synchronization
- ☐ Relationship Roles
- ☐ ISV Config

Export as unmanaged or  
managed solution

## Package Type



### ☒ Unmanaged

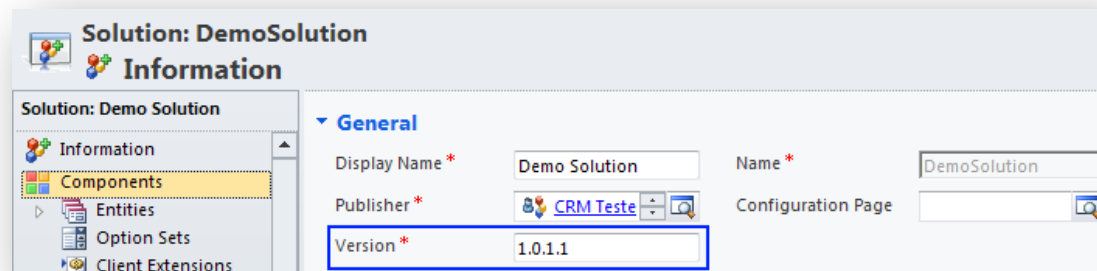
Use this option if you will not distribute the solution for other people to install. You will be able to modify this solution and can export it as managed in the future.

### ☐ Managed

Use this option if you will distribute the solution to be installed by other people. A managed solution cannot be directly modified or exported as unmanaged after it is installed.

# Updating solutions

- Managed solutions in the system can be updated with new versions of the solution file provided by the publisher
- No version control or rollback support in the CRM platform itself, needs to be managed by publisher
- Solution version numbers are simply metadata set by the publisher



# Managed properties

- By default, all custom solution components are customizable
- Managed properties can be enabled per component, which will enforce customization rights once the solution is exported as managed

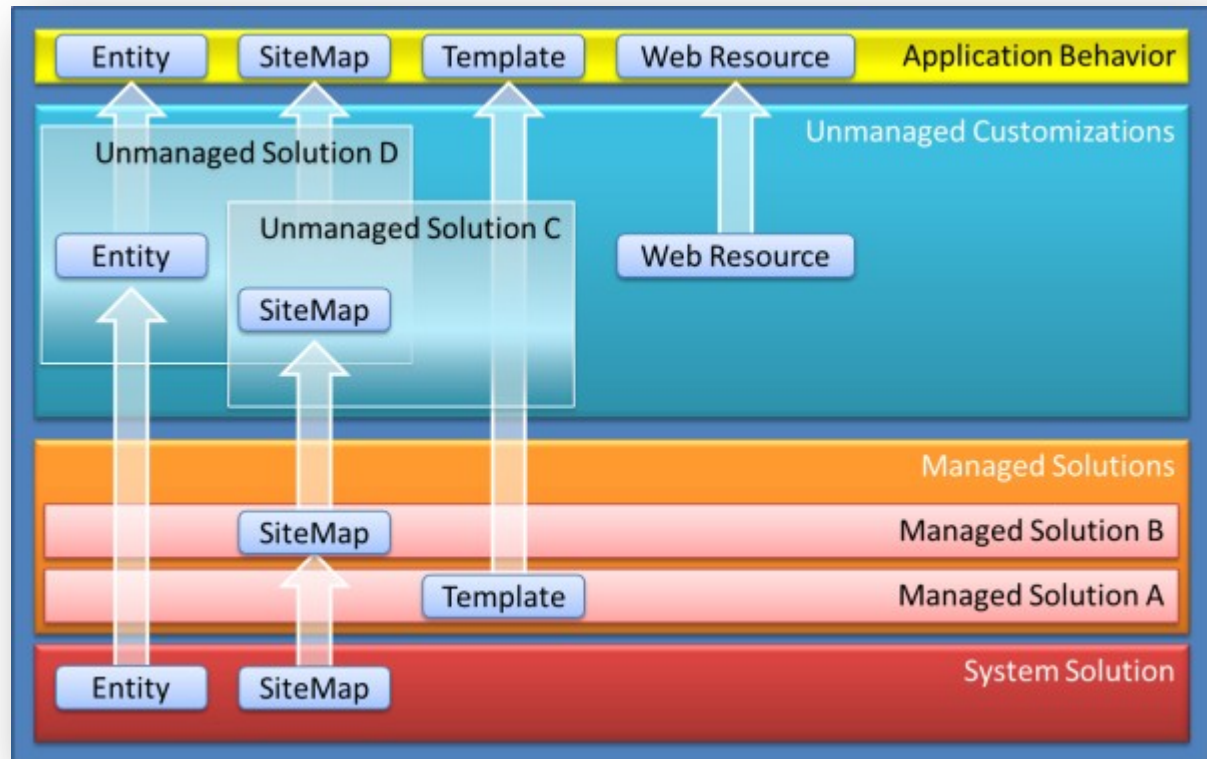
**Managed Properties of Entity : Custom Activity**  
Set the Managed Properties of this component.

The following properties will take effect only after the component is exported and imported as part of a managed solution.

|                                  |   |
|----------------------------------|---|
| Can be customized                | <input checked="" type="radio"/> True <input type="radio"/> False |
| Display name can be modified     | <input checked="" type="radio"/> True <input type="radio"/> False |
| Can Change Additional Properties | <input checked="" type="radio"/> True <input type="radio"/> False |
| New forms can be created         | <input checked="" type="radio"/> True <input type="radio"/> False |
| New charts can be created        | <input checked="" type="radio"/> True <input type="radio"/> False |
| New views can be created         | <input checked="" type="radio"/> True <input type="radio"/> False |

# Solution layering

- The active (default) solution is calculated from all the unmanaged and managed solutions applied to the system



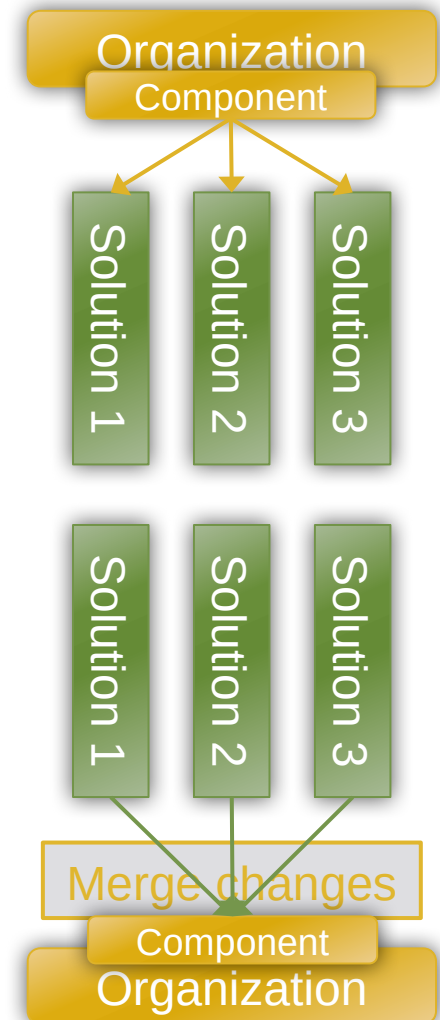
*From Microsoft Dynamics CRM 2011 Beta SDK*

# Merging solution contents

- Solutions can and will very likely have dependencies to the same shared components
- The order of solution installations is important: **the last one wins**
- Conflicting form and SiteMap customizations can cause surprising results, which may require manual fixing after solution installation
- Option sets have value prefixes to reduce the chances of conflicts between solutions
- Ribbon customizations are defined by only stating the changed controls through RibbonDiffXml

# Component export and import

- **Exporting** a solution component from an organization will contain **all the published changes**, as there is only one active component in the system at any given time (and not different versions)
- Upon **importing** solutions that update the same component, the **changes are merged** with the ones already published in the organization
- Therefore, each distinct solution that is interacting with the same components should be **developed inside a separate organization** of its own





# Dependency tracking

**Show Dependencies**

**Account: Dependencies**

Dependent components

You cannot delete this component while the following components are dependent on it.

| <input type="checkbox"/>            | Display Name             | Name/Id                  |
|-------------------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | Account Reconnect        | Account Reconnect        |
| <input type="checkbox"/>            | account_activity_parties | account_activity_parties |
| <input type="checkbox"/>            | Account_ActivityPointers | Account_ActivityPointers |
| <input type="checkbox"/>            | Account_Annotation       | Account_Annotation       |
| <input type="checkbox"/>            | Account_Appointments     | Account_Appointments     |
| <input type="checkbox"/>            | Account_AsyncOperations  | Account_AsyncOperations  |

1 - 70 of 70 (1 selected)

Required components

When you import a solution, the required components must be present in the solution being imported. You cannot delete the following components from the solution.

| <input type="checkbox"/> | Display Name | Name/Id |
|--------------------------|--------------|---------|
|--------------------------|--------------|---------|

**Missing Required Components**

The following components are missing from your solution. Import will fail if these components don't exist already in the target Microsoft Dynamics CRM organization. To add the missing components to your solution, cancel import, open the solution, and click the Add Required Components button.

| Display Name         | Name/Id              | Component Type | Parent Entity |
|----------------------|----------------------|----------------|---------------|
| Form                 | Form                 | System Form    | Account       |
| System Administrator | System Administrator | Security Role  |               |
| Scheduler            | Scheduler            | Security Role  |               |
| Lead Lookup View     | Lead Lookup View     | View           | Lead          |
| Open Opportunities   | Open Opportunities   | View           | Opportunity   |
| Top 10 Opportunities | Top 10 Opportunities | System Chart   | Opportunity   |
| Form                 | Form                 | System Form    | Account       |
| Active Services      | Active Services      | View           | Service       |

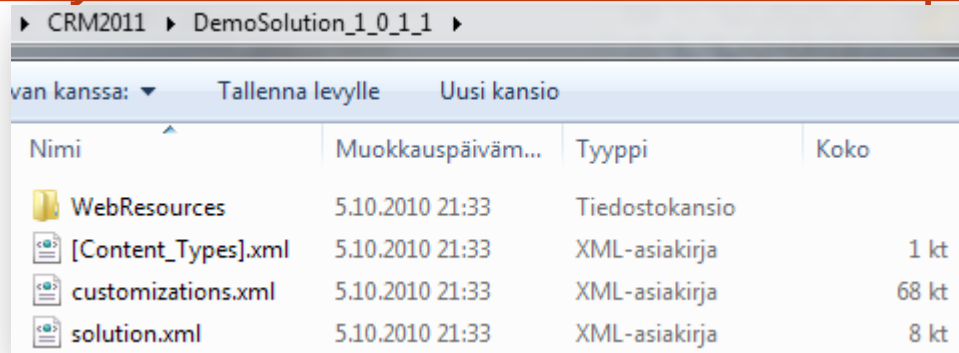
**Alerts upon solution export**

# Uninstall solutions

- Uninstalling an unmanaged solution will leave all the components in the system, only the solution record is removed
  - Unmanaged solutions are simply component groupings
- Uninstalling a managed solution will remove both components and data from the system
- See post from David Yack:  
<http://crm.davidyack.com/journal/2010/9/20/exploring-crm-2011-solution-framework-update-scenarios.html>

# Solution files

- ZIP files containing a set of XML files
- No encryption, content can be browsed by the customer also in managed solutions
- See blog post "Inside the solution XML file" by Gayan Perera for more information:
  - <http://weblogs.asp.net/gayanperera/archive/2010/09/14/peeking-into-the-dynamics-crm-2011-solution-export-file.aspx>



The screenshot shows a Windows Explorer window with the address bar set to 'CRM2011 > DemoSolution\_1\_0\_1\_1'. The window displays a list of files and folders. The table below represents the data shown in the screenshot.

| Nimi                | Muokkauspäiväm... | Tyyppi         | Koko  |
|---------------------|-------------------|----------------|-------|
| WebResources        | 5.10.2010 21:33   | Tiedostokansio |       |
| [Content_Types].xml | 5.10.2010 21:33   | XML-asiakirja  | 1 kt  |
| customizations.xml  | 5.10.2010 21:33   | XML-asiakirja  | 68 kt |
| solution.xml        | 5.10.2010 21:33   | XML-asiakirja  | 8 kt  |

# Solution layering strategies

- Evaluate the practical number of different solutions
  - More layers allow better modularity of solutions
  - ...but can make development and layer management tricky, due to number of files and organizations
- Separate CRM organization needed for publishing each individual solution layer
  - All exports are done from the unmanaged layer
- Only import managed solutions to your test environment to preserve the default (unmanaged) layer
- Automating build environments recommended to avoid mistakes of manual import process for multiple solution layers in multiple dev and test organizations

# Team development strategies

- When multiple developers are customizing a single environment, MS suggest the following strategies for manage team development:
- **Single organization, one master solution**
  - Developers must work on separate components
- **Single organization, multiple developer solutions + one master solution**
  - Each developer has an unmanaged solution + reference to master solution components, no need to merge changes
- **One organization per developer**
  - Each developer has their own environment from which unmanaged solutions are imported into a master solution

*From Microsoft Dynamics CRM 2011 Beta SDK*

# Web Resources

# Contents and use cases

- Web resources represent files that would have traditionally been placed on the CRM web server
- Resource types supported:
  - Images: png, jpg, gif, ico
  - Website(app) components: html, css, javascript
  - Silverlight applications
- Enables portability of custom pages and applications by packaging the resources into the solution file
- Available also in Outlook client offline mode

# Adding web resources

**Solution: Demo Solution**

**Component Type** Web Resource **View**

**More Actions**

- New
- Add Existing
- Delete
- Remove
- Publish
- Show Dependencies

**Web Resources**

**Web Resource: New**

**General**

Name \* test\_ TestWebResource

Display Name Test Web Resource

Description Just an HTML page.

**Content**

Type \* Web Page (HTML)

Language

Upload File

URL

Web Page (HTML)

Style Sheet (CSS)

Script (JScript)

Data (XML)

PNG format

JPG format

GIF format

Silverlight (XAP)

Style Sheet (XSL)

ICO format

Text Editor

Selaa...



# Script libraries

- Javascript libraries allow the central management and re-use of scripts across different entities and forms
- Functions from the libraries can be associated with form and field events in form customization UI, while managing the code itself on the Web Resource hosting the library
- See blog post by Ayaz Ahmad:
  - <http://ayazahmad.wordpress.com/2010/09/25/javascript-libraries-in-microsoft-dynamics-crm-2011/>

# Using Jscript libraries (1)

32

Solution: Customizations 1

## Web Resource: Filtered Lookup Test

**General**

Name \* new\_ FilteredLookupTest

Display Name Filtered Lookup Test

Description JScript library for testing purposes.

**Content**

Type \* Script (JScript) Text Editor

Language

Upload File Selaa...

**URL**

URL <https://teklacorporation.crm4.dynamics.com/>

**Edit Content -- WWW-valintaikkuna**

<https://teklacorporation.crm4.dynamics.com/>

### Edit Content

Edit Web Resource Content.

Source

```
function HandleOnChangeCustomerLookup()
{
    alert('On Change Called for Customer');
}
```

For information about how to interact with entities and fields programmatically, see the [Microsoft Dynamics CRM SDK](#)

OK Cancel

Upload or cut&paste scripts into a new Web Resource

# Using Jscript libraries (2)

## Field Properties

Modify this field's properties.

Display Formatting Details Events

Event List

Form Libraries

Manage libraries that will be available in the form

+ Add - Remove Up Down Edit

| Name                   | Display Name         | Description            |
|------------------------|----------------------|------------------------|
| new_FilteredLookupTest | Filtered Lookup Test | JScript library for... |

Event Handlers

Manage functions that will be called for form or field events

Control Potential Customer

Event OnChange

+ Add - Remove Up Down Edit Edit Library

| Library                | Function                     | Enabled |
|------------------------|------------------------------|---------|
| new_FilteredLookupTest | HandleOnChangeCustomerLookup | True    |

In form or field properties, add reference to the web resource with the script library

Attach functions from the library to specific form or field events

## Handler Properties

Library new\_FilteredLookupTest

Function \* HandleOnChangeCustomerLookup

☒ Enabled

Parameters

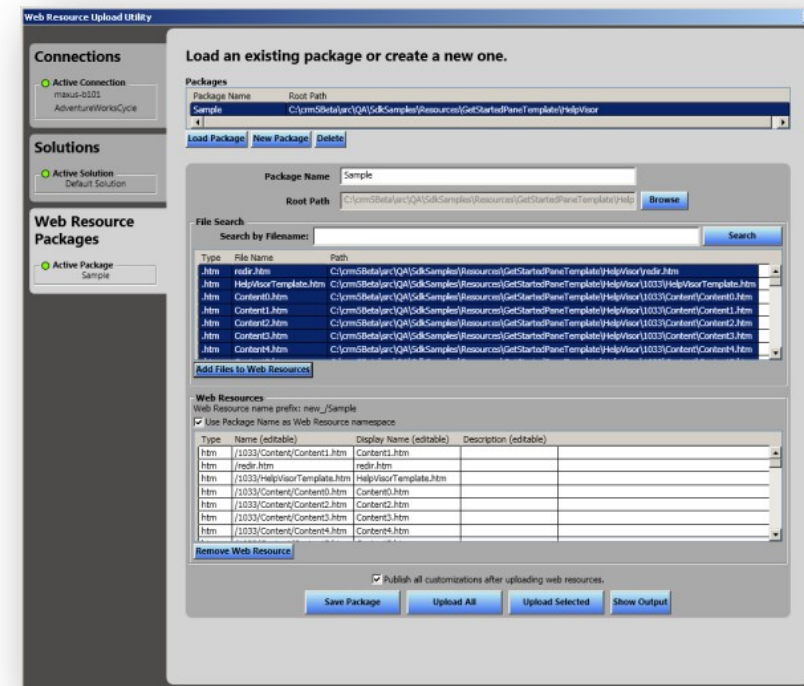
☐ Pass execution context as first parameter

Comma separated list of parameters that will be passed to the function

Pass parameters to functions

# Managing web resources

- CRM 2011 SDK contains a WPF tool called Web Resource Utility
- Can be used for building Web Resource Packages to simplify management and uploading of individual files for CRM Web Resources



# Processes

(previously known as Workflows)

# From workflows to processes

- Workflow concept has been replaced with Process
- Processes are split into 2 categories:
  - Workflows
  - Dialogs
- Dialogs are basically **interactive workflows** that allow the user to enter input data while the workflow logic is being executed in the background
- Whereas workflows can be started by a trigger and executed asynchronously, dialogs must be started by the user and **executed synchronously**
- In short, dialogs are the "wizard engine" for workflows

# Process Center

The screenshot displays the Microsoft Dynamics CRM 2011 interface. On the left is the 'Settings' sidebar with a tree view containing 'Business' (Business Management, Templates, Product Catalog), 'System' (Administration, Data Management, System Jobs, Document Management, Auditing), 'Customization' (Customizations, Solutions, Dynamics Marketplace), and 'Process Center' (Processes). The 'Processes' link is highlighted. The main area shows 'Processes: My Processes' with a table of processes. Below this is a 'Create Process' form with fields for 'Process name', 'Entity', and 'Category'. A yellow callout bubble points to the 'Category' dropdown, which has 'Workflow' and 'Dialog' as options. Another yellow callout bubble points to the 'Processes' link in the sidebar.

**Processes: My Processes**

| Process Name                     | Category | Primary Entity |
|----------------------------------|----------|----------------|
| AccountTestDialog                | Dialog   | Account        |
| Bankrupt customer                | Dialog   | Account        |
| Bankruptcy task to HQ accounting | Workflow | Account        |
| Lead source test                 | Workflow | Account        |

**Create Process**

Create a new process definition or a process based on an existing template. There are two categories of processes you can create, dialogs and workflows.

Process name: \* Demo Dialog

Entity: Account

Category: Workflow

Type: New blank process

From an existing template (select from list):

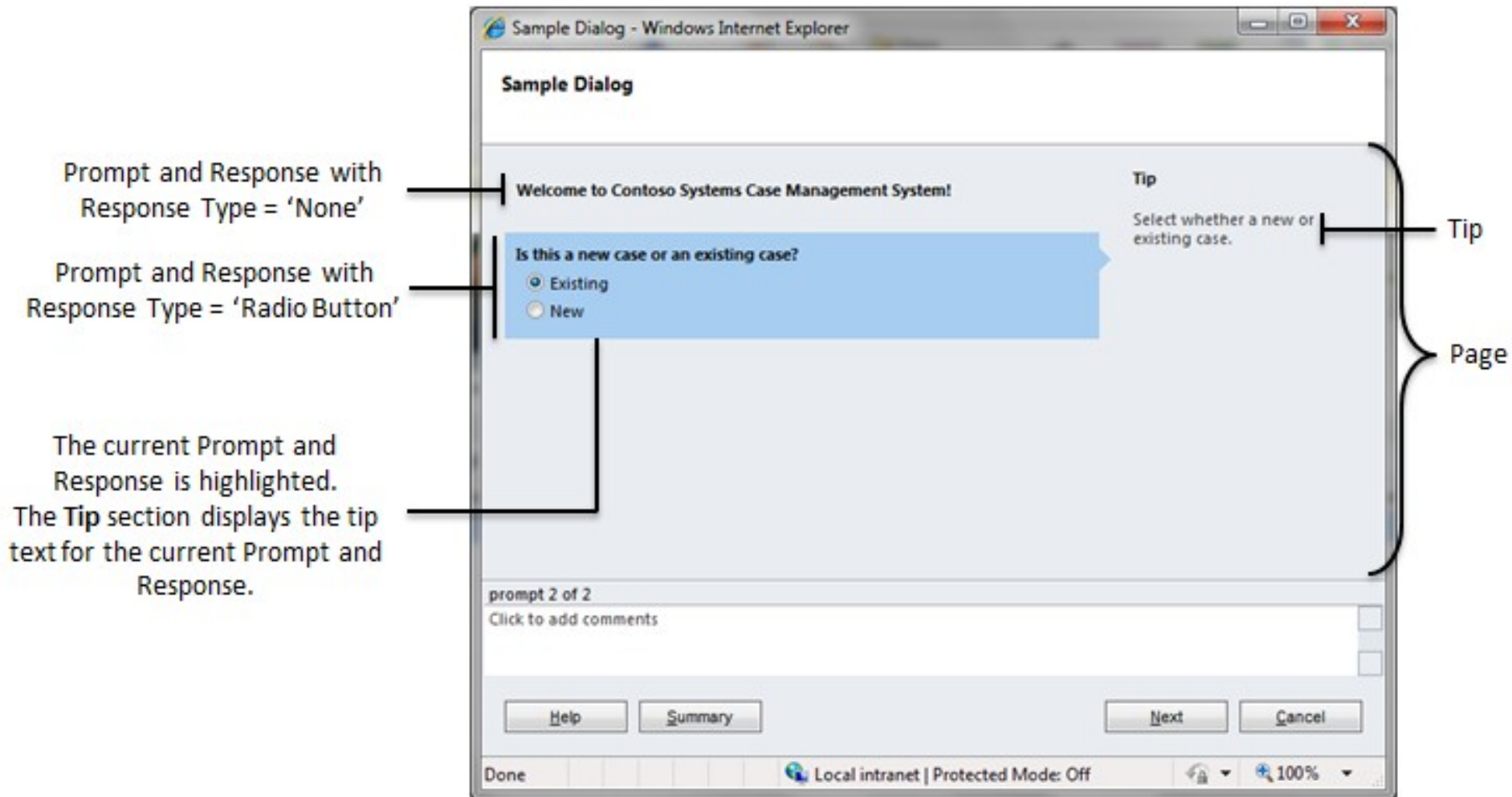
| Name | Primary Entity | Owner |
|------|----------------|-------|
|------|----------------|-------|

No process template records are available in t

Also the Process Designer UI is common to both Workflows and Dialogs

Dialogs and Workflows have similar presentation in the CRM UI under Process menus

# Dialog page components



From Microsoft Dynamics CRM 2011 Beta SDK

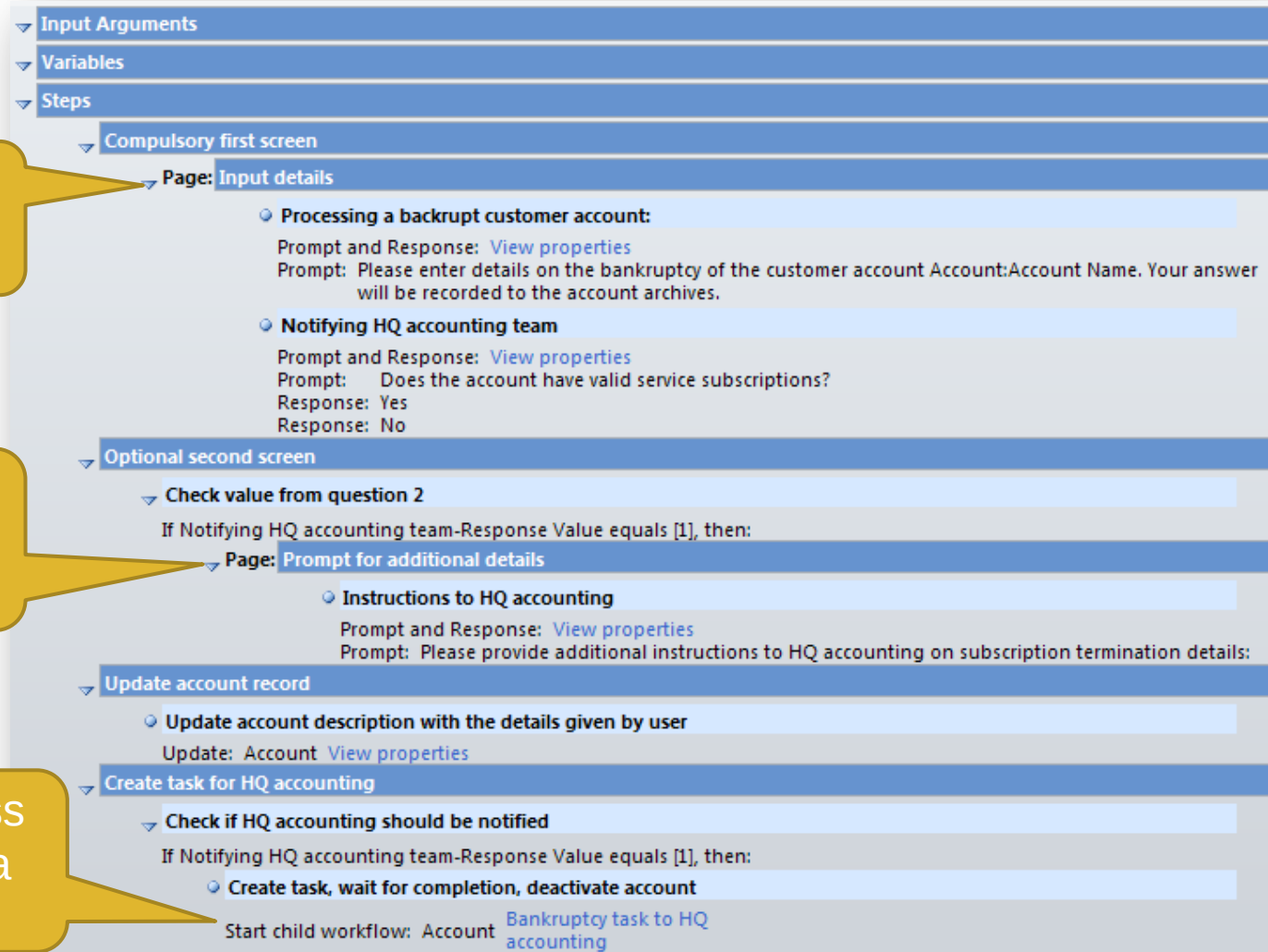


# Dialog process conditions

Dialog page 1 with  
2 input prompts

Dialog page 2  
shown based on  
page 1 response

Continue the process  
asynchronously in a  
child workflow



# Dialog prompt options

Insert hyperlinks to instructions

Collect response data as picklist, nvarchar or ntext

Type in list of values or query CRM data

Insert dynamic values to text

**General**

Statement Label \* Prompt2

**Prompt Details**

Prompt Text \*

This is the second prompt, still on the first page.

Tip Text

Select a value, please! Or <hyperlink> <name> click this hyperlink</name> <value> http&#58;&#47;&#47;crm.dynamics.com</value> </hyperlink> for more information.

**Response Details**

Response Type Option Set (picklist) Log Response ☒ Yes ☐ No

Data Type Text Default Value

Provide Values ☒ Define Values ☐ Query CRM data

Response Values

Selection 1  
Selection 2  
Selection 3

Value \*  
Label \*

**Form Assistant**

Dynamic Values

Dynamic Values

Operator: Set to

Look for: Dialog

**Primary Entity**  
Account

**Related Entities**  
Created By (Delegate) (User)  
Created By (User)  
Currency (Currency)  
Master ID (Account)  
Modified By (Delegate) (User)  
Modified By (User)  
Originating Lead (Lead)  
Owner (Owner)  
Owning Business Unit (Business)  
Owning Team (Team)  
Owning User (User)  
Parent Account (Account)  
Preferred Facility/Equipment (Fac)  
Preferred Service (Service)  
Preferred User (User)  
Price List (Price List)  
Primary Contact (Contact)  
Territory (Territory)

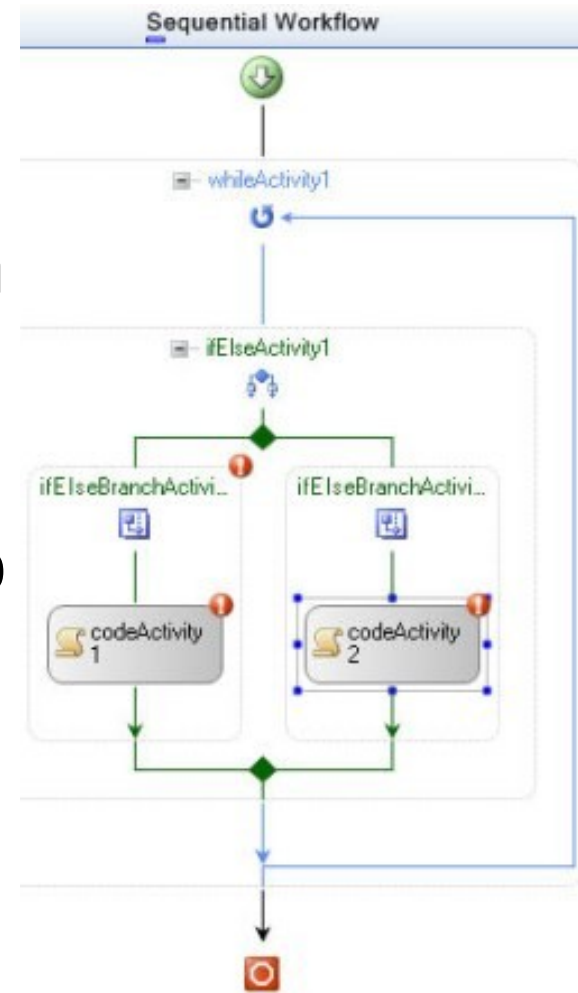
**Local Values**  
Dialog  
Process

# Examples of Dialog use cases

- Replace the built-in dialog windows such as "convert lead" or "close opportunity" with custom logic, also replace the ribbon buttons with references to custom Dialogs
- Guide the user in new record creation process by showing instructions in prompts
- Force the input of several required variables and descriptions when updating a field that is disabled on the entity form

# Processes for developers

- .NET Framework 4.0 workflows
- Create custom workflow activities
- Fully declarative XAML modeling in WF 4 (workflows & activities)
- Single XAML file
- Modifications through Visual Studio 2010 Workflow Designer
- Not supported for CRM Online



# Process administration

**System Job: Contacts**

**Information**

Information  
General  
Details

Related

**General**

Name: Contacts Type: Matchcode Upd

Regarding: Created On: 24.10 15

Job Owner\*: SYSTEM Completed On: 24.10 15

Retry Count: 0

**Details**

Message

A SQL Server error occurred. Try this action again. If the problem continues, check the Microsoft Dynamics CRM Community for solutions or contact your organization's Microsoft Dynamics CRM Administrator. Finally, you can contact Microsoft Support.

<OrganizationServiceFault xmlns:i="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://schemas.microsoft.com/xrm/2011/Contracts">  
<ErrorCode>-2147204784</ErrorCode>  
<ErrorDetails  
xmlns:d2p1="http://schemas.datacontract.org/2004/07"  
<Message></Message>  
<Timestamp>2010-10-24T16:45:54.7431537Z</Timestamp>  
<InnerFault>  
<ErrorCode>-2147204784</ErrorCode>  
</ErrorDetails>  
</OrganizationServiceFault>

System job error details visible in UI

Completed system job deletion can be set per workflow, to manage AsyncOperationBase table size

**Process: Queue Item notification**

**Information**

Working on solution: Default Solution

General Administration Notes

Owner\*: First Last

Description: This is a demo workflow on Queue Items, to pass on worker information.

**Workflow Job Retention**

☒ Automatically delete completed workflow jobs (to save disk space)

# Upgrade from CRM 4.0

- Running workflow instances will be upgraded to .NET 4 during server/organization upgrade
- Custom workflow activities written for CRM 4.0 in .NET 3 are wrapped into .NET 4 interop activity

# Notes on processes

- Processes can be called through URL in a custom ribbon button
- Combined with the new queues and custom activities in CRM 2011, processes and dialogs provide "a better work management story" for visualizing business process automation in CRM UI

# Dialog limitations

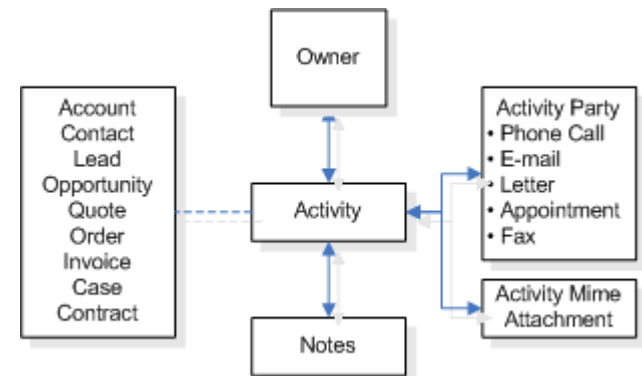
- Dialog prompts do not support many native CRM form attribute types:
  - Bit, date, lookup...
- Fields cannot be set as mandatory
- Dialogs cannot be paused/resumed
- Option sets cannot be queried in a Dialog
- Custom UI's cannot be embedded into Dialog pages (iframe/Silverlight/etc.)



# Custom Activities

# Features

- Possible use cases:
  - Extending messaging types (IM, SMS etc.)
  - Work orders or other process specific activities
- Support for all the different activity participant types available in out-of-the-box entity types
  - Customer, To, From, Cc, Required, Optional, Resource etc.
- Display child record activities in account/opportunity roll-up views



*From Microsoft Dynamics CRM 2011 Beta SDK*

# Creating a custom activity

General Primary Field

**Entity Definition**

Display Name \* Custom Activity Ownership \* User or Team

Plural Name \* Custom Activities

Name \* new\_customactivity

Description Testing out the creation of a custom activity entity.

☒ Define as an activity entity.

☒ Display in Activity Menus

Define entity type as activity upon creation and set visibility

Partylist attributes will be created for each custom entity by default

Custom Activity Fields

Solution: Default Solution

View: All

New X Edit More Actions

|                                     | Name                 | Display Name        | Type                |
|-------------------------------------|----------------------|---------------------|---------------------|
|                                     | bcc                  | BCC                 | partylist           |
|                                     | cc                   | CC                  | partylist           |
|                                     | createdby            | Created By          | Lookup              |
|                                     | createdon            | Date Created        | Date and Time       |
|                                     | createdonbehalfby    | Created By (Del...  | Lookup              |
| <input checked="" type="checkbox"/> | customers            | Customers           | partylist           |
|                                     | description          | Description         | Multiple Lines o... |
|                                     | exchangerate         | Exchange Rate       | Decimal Number      |
|                                     | from                 | From                | partylist           |
|                                     | importsequencenumber | Import Sequenc...   | Whole Number        |
|                                     | instancetypecode     | Recurring Insta...  | Option Set          |
|                                     | isbilled             | Is Billed           | Two Options         |
|                                     | isregularactivity    | Is Regular Activity | Two Options         |
|                                     | isworkflowcreated    | Is Workflow Cre...  | Two Options         |
|                                     | modifiedby           | Modified By         | Lookup              |
|                                     | modifiedon           | Last Updated        | Date and Time       |
|                                     | modifiedonbehalfby   | Modified By (De...  | Lookup              |
|                                     | optionalattendees    | Optional Atten...   | partylist           |
|                                     | organizer            | Organizer           | partylist           |
|                                     | overriddencreatedon  | Record Created ...  | Date and Time       |
|                                     | ownerid              | Owner               | Owner               |
|                                     | owningbusinessunit   | Owning Busine...    | Lookup              |
|                                     | owningteam           | Owning Team         | Lookup              |
|                                     | owninguser           | Owning User         | Lookup              |
|                                     | partners             | Outsource Ven...    | partylist           |
|                                     | prioritycode         | Priority            | Option Set          |
|                                     | regardingobjectid    | Regarding           | Lookup              |
|                                     | requiredattendees    | Required Atten...   | partylist           |

# Example of a custom activity

Convert activity to other records

Send activity to queue

Manage activity parties

The screenshot displays the 'Custom Activity' form in Microsoft Dynamics CRM 2011. The form is titled 'Custom activity for an account' and is categorized as a 'Custom Field (FLS)'. It was created on 23.10.2010 at 18:02 by Jukka Niiranen. The form is divided into several sections: 'General', 'Notes', and 'Activity Status'. The 'General' section includes fields for Subject, Regarding, To, Priority, Start Date, Due Date, and Description. The 'Notes' section contains a list of notes, with the most recent one titled 'Note created on 23.10.2010 18:03 by Jukka Niiranen'. The 'Activity Status' section shows the status as 'Open' and the last updated time as 23.10.2010 18:02. The form is also linked to a 'Custom Activity' record, which is visible in the top right corner. The left sidebar shows the 'Information' pane with 'General' and 'Notes' tabs, and the 'Related' pane with 'Common' and 'Processes' sections. The top ribbon includes tabs for 'File', 'Custom Activity', and 'Customize', with various action buttons like 'Mark Complete', 'Save', 'Delete', 'Close Custom Activity', 'To Opportunity', 'Promote to Response', 'Connect', 'Add to Queue', 'Assign', 'Copy a Link', 'E-mail a Link', 'Run Workflow', 'Start Dialog', and 'Run Report'.

**File** Custom Activity Customize

Mark Complete Save Save & Close Delete Save & New Close Custom Activity To Opportunity Promote to Response Connect Add to Queue Assign Copy a Link E-mail a Link Run Workflow Start Dialog Run Report

Information

- General
- Notes

Related

- Common
  - Connections
  - Audit History
- Processes
  - Workflows
  - Dialog Sessions

**Custom Activity**

Custom activity for an account

Custom Field (FLS) Date Created 23.10.2010 18:02 Created By Jukka Niiranen

**General**

Subject \* Custom activity for an account

Regarding Another Test Account

To Jukka Niiranen

Priority Normal Owner \* First Last

Start Date 23.10.2010 0:00 Due Date 30.10.2010 0:00

Description Yes we can

**Notes**

Add a new note...

Title: Note created on 23.10.2010 18:03 by Jukka Niiranen  
23.10.2010 16:03 by Jukka Niiranen Edited 23.10.2010 16:03 by Jukka Niiranen

Note this

Activity Status Open Last Updated 23.10.2010 18:02 Modified By Jukka Niiranen

# Managing custom activities

The screenshot displays the Microsoft Dynamics CRM 2011 interface. The top ribbon includes tabs for 'File', 'Account', 'Create Related', and 'Customize'. Under the 'Create Related' tab, there are buttons for 'Attach File', 'Add Note', 'Task', 'E-mail', 'Phone Call', 'Letter', 'Fax', 'Appointment', 'Recurring Appointment', 'Service Activity', 'Other Activities', and 'Custom Activity'. A yellow callout bubble points to the 'Other Activities' and 'Custom Activity' buttons with the text 'Create related activities'.

Below the ribbon, the 'Information' pane on the left shows a tree view with 'General', 'Details', 'Administration', and 'Notes'. The main area shows the 'Account' section for 'Another Test Account'.

Overlaid on the bottom right is a window titled 'Activities: Open Activities'. It has filters for 'Due' (All) and 'Type' (All). The 'Type' dropdown is open, showing a list of activity types: All, Task, Fax, Phone Call, E-mail, Letter, Appointment, Service Activity, Campaign Response, Campaign Activity, Recurring Appointment, and Custom Activity. The 'Custom Activity' option is highlighted.

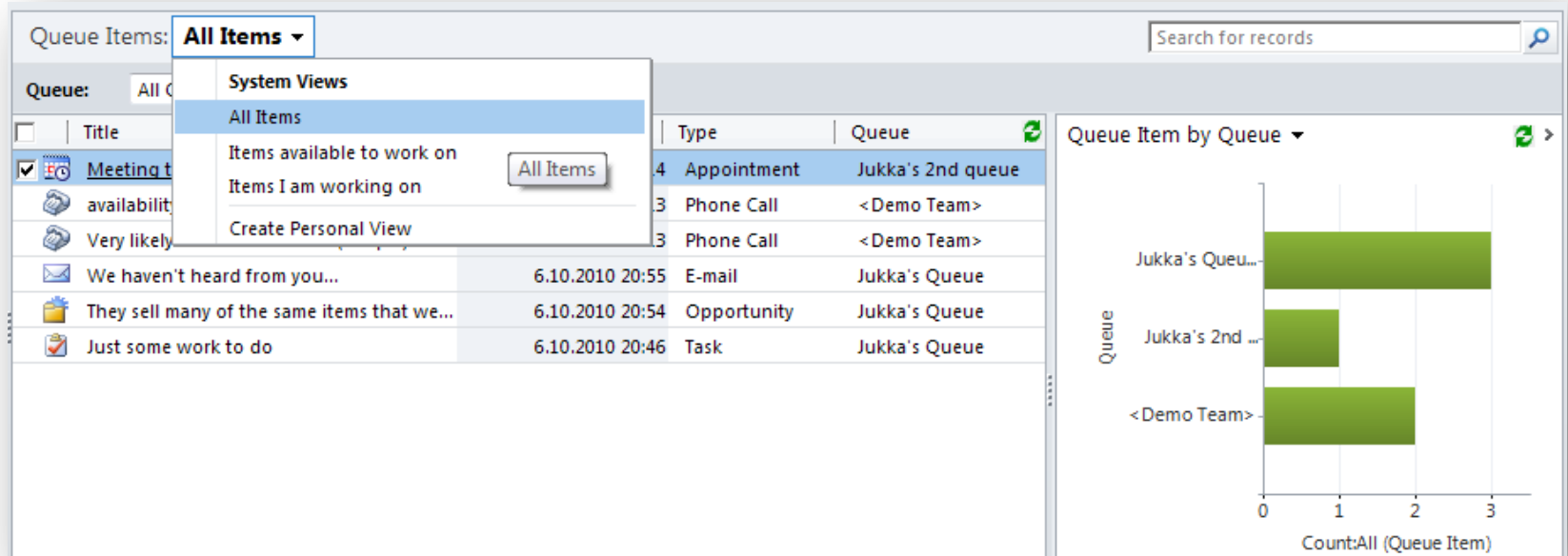
Below the filters is a table of activities. A yellow callout bubble points to the table with the text 'View open activities'.

| Subject  | Regarding            | Type            | Status | Priority |
|--|----------------------|-----------------|--------|----------|
| <input checked="" type="checkbox"/> Access to power negotiated (sample)        |                      |                 |        |          |
| <input type="checkbox"/> Agree to above in Sponsor letter (sample)             |                      |                 |        |          |
| <input type="checkbox"/> Another activity for an Order                         | Jukka Test Account   |                 |        |          |
| <input type="checkbox"/> Another custom activity, for an Opportunity           | Jukka Test Account   |                 |        |          |
| <input type="checkbox"/> Asked for business (sample)                           |                      |                 |        |          |
| <input type="checkbox"/> availability of Product catalogs (sample)             |                      |                 |        |          |
| <input type="checkbox"/> Call and say hi                                       | Jukka Test Account   | Phone Call      | Open   | Normal   |
| <input type="checkbox"/> Cancel all subscriptions for Another Test Account     | Another Test Account | Task            | Open   | Normal   |
| <input type="checkbox"/> Check sales literature for recent price list (sample) |                      | Task            | Open   | Normal   |
| <input type="checkbox"/> Custom activity for an account                        | Another Test Account | Custom Activity | Open   | Normal   |

# Queue enhancements

# Queues in CRM 2011

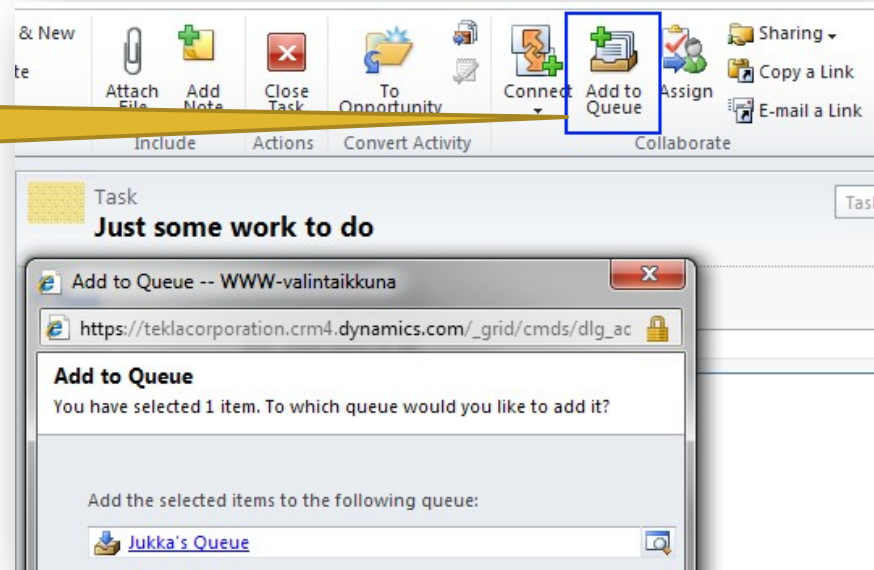
- All customizable entities can be enabled for queues
- By default, queues are automatically generated for users, teams and business units
  - All of these can also be used for managing user rights



# Adding record to queue

Manually add records to queue

Set all created & assigned records to appear in owner's queue automatically



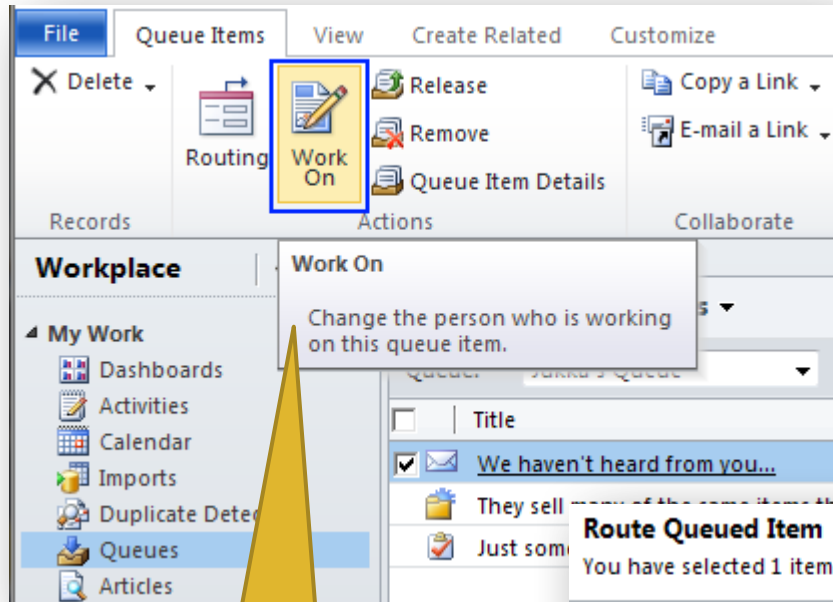
## Options for Entity

Select an option to enable the feature for this entity. After you enable these options, they can never be disabled.

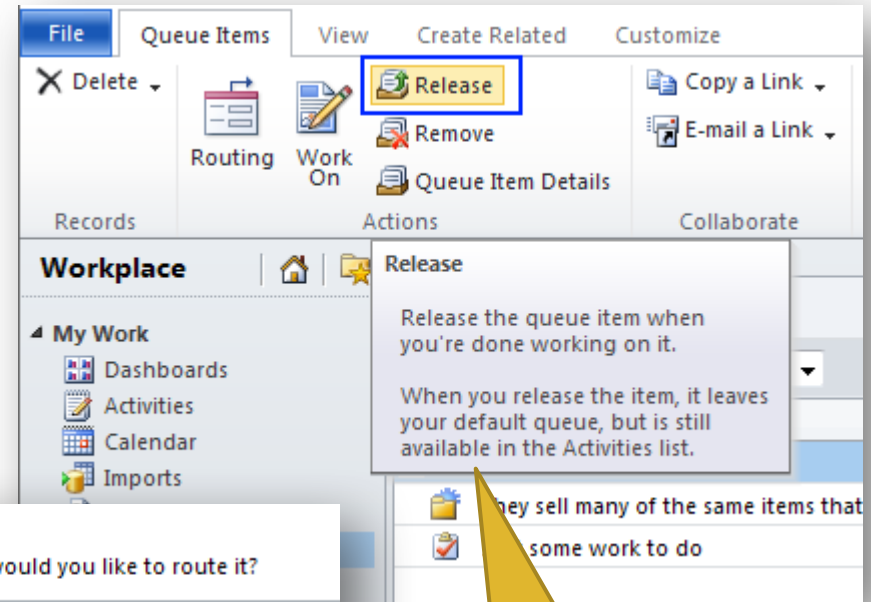
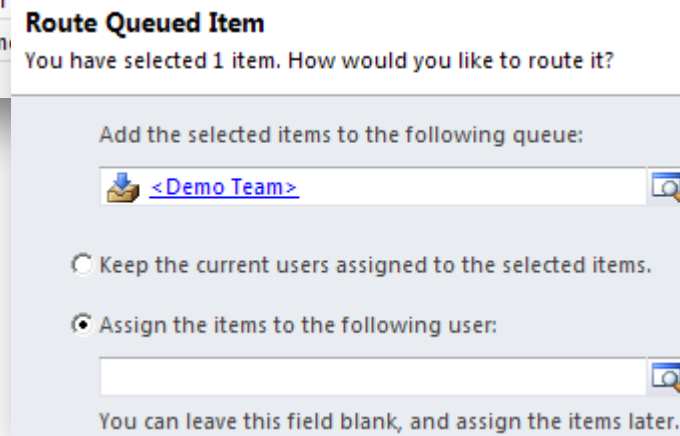
- ☒ Note (includes attachments)
- ☒ Activities
- ☒ Sending e-mail (If an e-mail field does not exist, one will be created)
- ☒ Queues
  - ☒ Automatically move records to the owner's default queue when a record is created or assigned.



# Actions on queue items



Declare who is working on the queue item



Release queue items without completing them

# Queue item entity

File Queue Item Customize

Save Save & Close Copy a Link E-mail a Link Run Workflow Start Dialog

Save Collaborate Process

Information  
General

Related  
Common  
Audit History  
Processes  
Workflows  
Dialog Sessions

Queue Item  
**We haven't heard from you...**

Queue Items

General

Queue \* Jukka's Queue Queue Item \* We haven't heard fro

Worked By

Entered Queue 6.10.2010 20:55

Modified On 6.10.2010 20:55

Workflows can be triggered based on queue item creation / update

- ▼ Check that someone is working on the item  
Wait until Queue Item:Worked By contains data, then:
  - Create a task with worker info  
Create: Task View properties

# Multiple forms per entity

# Role based forms

- Entities can now have more than one form
- Existing forms can be copied to create variations
- The form presented to a user is determined by the security roles assigned to available forms
- No support for "rule based forms", i.e. showing a form based on entity variable data
  - Show/hide scripts still needed to achieve the functionality

# Managing form security roles

**Solution: Demo Solution**  
**Form: Account**

**Assign Security Roles: Test Form**  
Select the security roles for which this form will be displayed.

☐ Display to everyone  
☒ Display only to these selected security roles

| <input type="checkbox"/> | Name                   | Business Unit |
|--------------------------|------------------------|---------------|
| <input type="checkbox"/> | Marketing Professional | Externals     |
| <input type="checkbox"/> | Sales Manager          | Externals     |
| <input type="checkbox"/> | Salesperson            | Externals     |
| <input type="checkbox"/> | Schedule Manager       | Externals     |

1 - 14 of 14 (0 selected)

**Fallback**  
☐ Enabled for fallback

Determine security roles that are allowed to view the form

Set fallback form when no matching roles found

# Managing form order

Define form display priority order when roles allow viewing multiple forms

**Account Forms**

**Solution: Demo Solution**

- Information
- Components
- Entities
  - Account
    - Forms**
    - Views
    - Charts
    - Fields
    - 1:N Relations...
    - N:1 Relations...
    - N:N Relations...
    - Messages
  - Option Sets
  - Client Extensions
  - Web Resources
  - Processes
  - Plug-in Assemblies
  - Sdk Message Proces...
  - Service Endpoints

**View: All Forms**

New | X | 16 Assign Security Roles | 16 Form Order | More Actions

|                                     | Name           | Form Type | State     | Customizable | Parent Form |
|-------------------------------------|----------------|-----------|-----------|--------------|-------------|
| <input checked="" type="checkbox"/> | 16 Test Form   | Main      | Unmanaged | True         |             |
| <input type="checkbox"/>            | 16 Information | Main      | Managed   | True         |             |
| <input type="checkbox"/>            | 16 Information | Mobile    | Managed   | True         |             |

**Form Order -- WWW-valintaikkuna**

https://.crm4.dynamics.com/Tools/FormEditor/D

**Form Order**

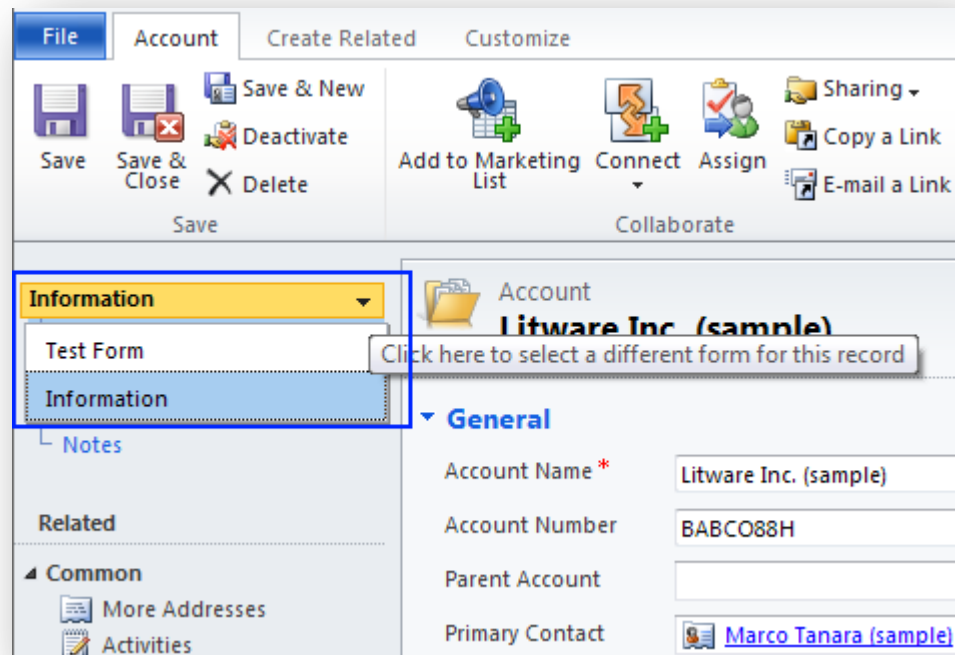
Specify the order in which you would like the form set to be displayed. Depending on the user's role, only some of these forms will be visible.

Information

Test Form

# Form selector

- When a user has the security roles that allow viewing more than one form, a form selector will be shown
- Form can be changed with onLoad script
  - Note: will cause the form to load again (and the onLoad event...)



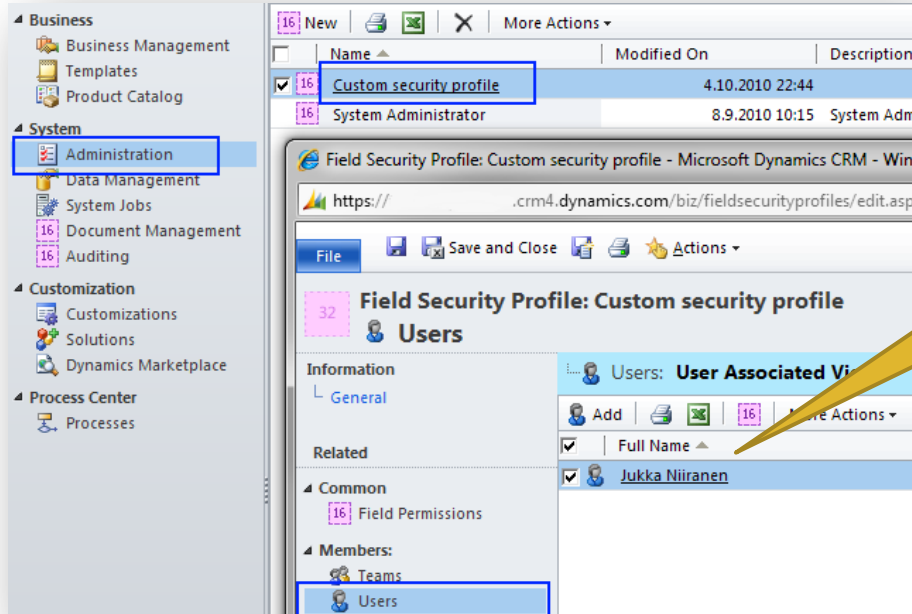
# Security features



# Field Level Security

- In addition to entities and forms, data visibility in CRM 2011 can be controlled also per field
- Applies to all components (reports, filtered views), data is never sent to client without access rights
- Field Security is not available for standard fields, such as contact address & name

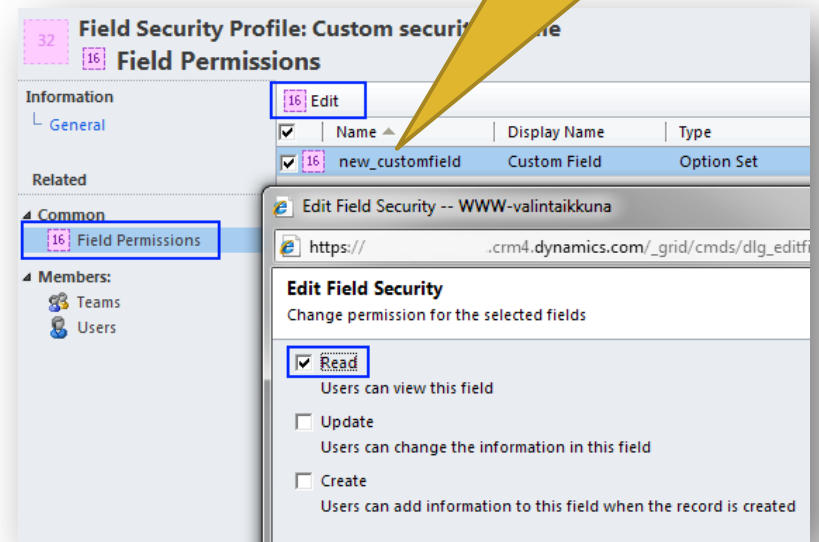
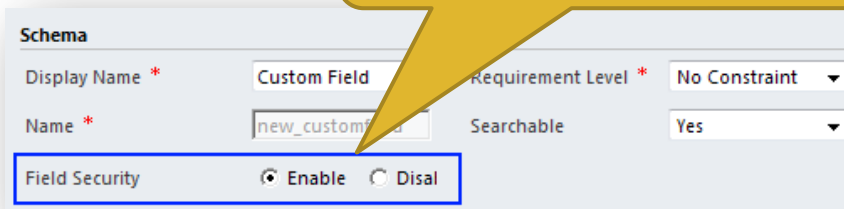
# Enabling field security



Create a Field Security Profile and assign it to users or teams

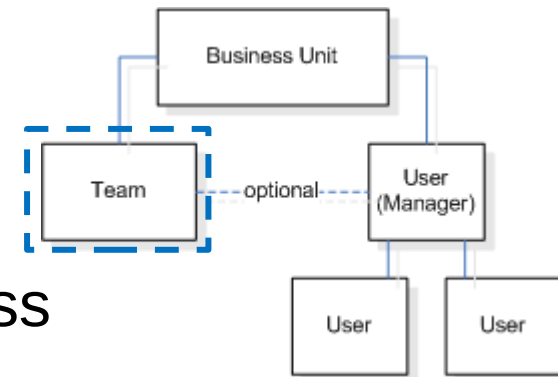
Set access rights per profile

Enable Field Security in entity customizations



# Team ownership

- New features:
  - Assign security roles to an entire team
  - Teams can own records
  - There is a default team for each business unit. All users in a business unit are members of this team
  - Access checks are **additive**. You can access entities based on the roles assigned to the user plus the roles assigned to the team a user is a member of. This allows a user to have privileges outside their business unit
  - Teams can be deleted





*From Microsoft Dynamics CRM 2011 Beta SDK*





# Assigning records to teams

Team  
**Demo Team**

Teams ▼ ▲ ▼

▼ **General**

Team Name\* Demo Team Business Unit\*  Sub BU 

Administrator\*  Jukka Niiranen  Default Queue  <Demo Team> 






Description

Define team BU

Information  
↳ General



Related


Common

-  Members
-  Security Roles
-  16 Field Security Profiles
-  Connections
-  16 Audit History

Team  
**Demo Team**

Security Roles: Role Assignment View ▼



Manage Roles |   Remove Roles | More

| <input checked="" type="checkbox"/> | Name ▲  | Business Unit |
|-------------------------------------|---|---------------|
| <input checked="" type="checkbox"/> |  Sales Manager | Sub BU        |

Assign security roles  
and members to team

Account  
**Shared Test Account**

▼ **Administration**

Owner\*  Demo Team 

Assign team as  
record owner

# CRM Online enhancements

# Code on the server

- Plug-in deployment to CRM Online allowed with isolated mode (sandbox)
  - Cannot access files, event log, network, etc.
- Custom workflow activities are not supported
- Plug-ins can consist of only a single assembly .dll
- Plug-in statistics available for monitoring the behavior of individual plug-ins in a hosted environment
  - Execution count, failure count, crash count

# Custom applications

- Web Resources in solutions cannot execute code
- No support for .aspx pages, MS suggested solution is to host these pages on Azure
- Custom UI's could be built with HTML/jQuery or Silverlight, to allow packaging and distribution inside the solution file

# Custom reports

- Custom SSRS reports can be uploaded to CRM Online
- However, no direct access is allowed to database views = no SQL data sources can be used
- FetchXML will be the primary method for building custom reports for CRM Online
- Runtime component available for SSRS, Fetch Authoring Extension for VS
- See post on MS CRM Team Blog for details:
  - <http://blogs.msdn.com/b/crm/archive/2010/10/19/getting-started-with-custom-reports-in-the-cloud.aspx>



# Dynamics Marketplace

# Marketplace features

- Integrated into the Settings menu in CRM
- Built on the existing Microsoft Pinpoint site
- Listings for add-on applications, professional services, hosting services
- CRM 2011 is not a requirement, thus available also for add-on applications that are not delivered as solution packages
- Initially no eCommerce functionality available for purchase and payment transactions

# Marketplace in CRM

The screenshot displays the Microsoft Dynamics CRM 2011 Marketplace interface. On the left is a navigation pane with sections: Settings (Business Management, Templates, Product Catalog), System (Administration, Data Management, System Jobs, Document Management, Auditing), Customization (Customizations, Solutions), Process Center (Processes), Workplace (Sales, Marketing, Service), and Resource Center. The main area is titled 'Dynamics Marketplace' and features a grid of applications categorized by 'Popular' and 'Newest'. Applications shown include ADVANTAGE RMI Corpora, Apparel and Sunrise Tech, Asset Manager StarDyne Technologies, and BRIX 2009 Aurigo Software Technologies Inc.

On the right, a detailed view of an application is shown. The header includes the Microsoft Dynamics Marketplace Beta logo, a 'Sign In | United States' link, and buttons for 'Get Listed', 'Help', 'About', and 'Free CRM Online Trial'. The search bar indicates the user is looking for 'Applications' and has entered 'E-mail Hosting and Management'. The results show 4 apps found, sorted by 'Best Match'.

The first application listed is 'Email Marketing for Microsoft Dynamics CRM' by CoreMotives. It is an online application with a price of 'For Purchase'. The description states: 'Send bulk email marketing from within Microsoft CRM and immediately know who is clicking and viewing your web pages. - Easily create professional-looking emails in minutes - Track clicks, bounces, unsubscribes, web visits - Save money by having all sends & responses... Read more'. The product/platform is 'Windows Azure Platform'. Categories include 'Marketing Communications, Web Analytics, Usability Testing, E-mail Hosting and Management'.

The second application listed is 'ConnectED' by SRC Technology Solutions. It is also an online application with a price of 'For Purchase'. The description states: 'ConnectED helps your organization to improve collaboration and drive real-world results by adopting a Customer Relationship Management (CRM) approach to the business of Industry Attraction and Business Retention / Expansion. The solution set was initially designed for the... Read more'. Categories include 'Customer Service, CRM, Intranets, Extranets, Portals, Document Management, ... (more)'.

# Marketplace listing contents

**RATED**  
**4.0**  
★★★★☆  
[1 Review](#)

[Buy From Company](#)

PRICING:  
**For Purchase**  
[Contact Company](#)

SUPPORT AND DOCUMENTATION:  
[General Information](#)  
[Setup + Deployment](#)

RELATED APPS AND SERVICES:  
[View all Apps from this Company](#)

## Email Marketing for Microsoft Dynamics CRM

by CoreMotives

|                   |  |
|-------------------|--|
| APP TYPE:         | Online Application, On-premises Application  |
| CATEGORY:         | <a href="#">Marketing Communications</a> , <a href="#">Web Analytics</a> , <a href="#">Usability Testing</a> , <a href="#">E-mail Hosting and Management</a> |
| WORKS WITH:       | Microsoft Dynamics CRM, Microsoft Dynamics Live CRM  |
| INDUSTRY FOCUS:   | General - Applicable to All  |
| PRODUCT/PLATFORM: | Windows Azure Platform   |

**App Overview**

**Reviews**

**Company**

Email Marketing for Microsoft Dynamics CRM has an overall rating of ★★★★★ from 1 customer.

[Submit A Review](#)

*The views and opinions submitted and expressed here are not those of Microsoft.*

Sort by: **Newest First** [Oldest First](#) [Highest Rated](#) [Lowest Rated](#)

**Highly integrated tool for smart email campagins and beyond**

**4.0** OVERALL RATING  
★★★★☆

REVIEWED BY: Jukka\_CRM    REVIEWED ON: 7/27/2010

**PROS**

The Email Marketing module from CoreMotives really fits well into the CRM user experience, due to the fact that it has been designed to work inside Dynamics CRM, unlike some other competing products where the CRM integration has later on been added as a feature. Flexible pricing without user or server licenses helps drive wider adoption beyond just the marketing department.

**CONS**

The retrofit to CRM version 3.0 created some usability issues

|                  |       |
|------------------|-------|
| PRICE:           | ●●●●● |
| DEPLOYMENT TIME: | ●●●●● |
| NEEDS MET:       | ●●●●● |
| COMPATIBILITY:   | ●●●●● |
| PERFORMANCE:     | ●●●●● |

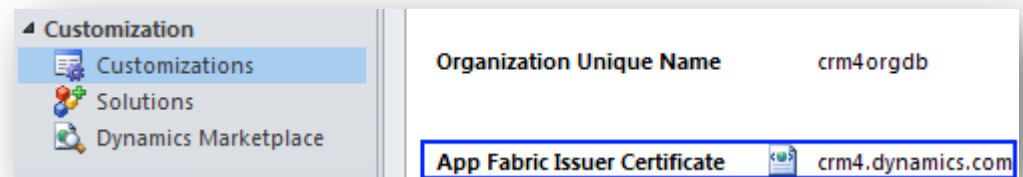
# Listing requirements

- Two separate categories for applications:
  - Certified for Microsoft Dynamics (CfMD)
  - Community-rated solution
- Requirements for certified applications
  - Application must pass the CfMD software tests
  - 10 customer references
  - MS Gold Certified Partner status
  - Sure Step certification exam
  - Escrow service must be used for storing IP assets such as source code and documentation

# Azure

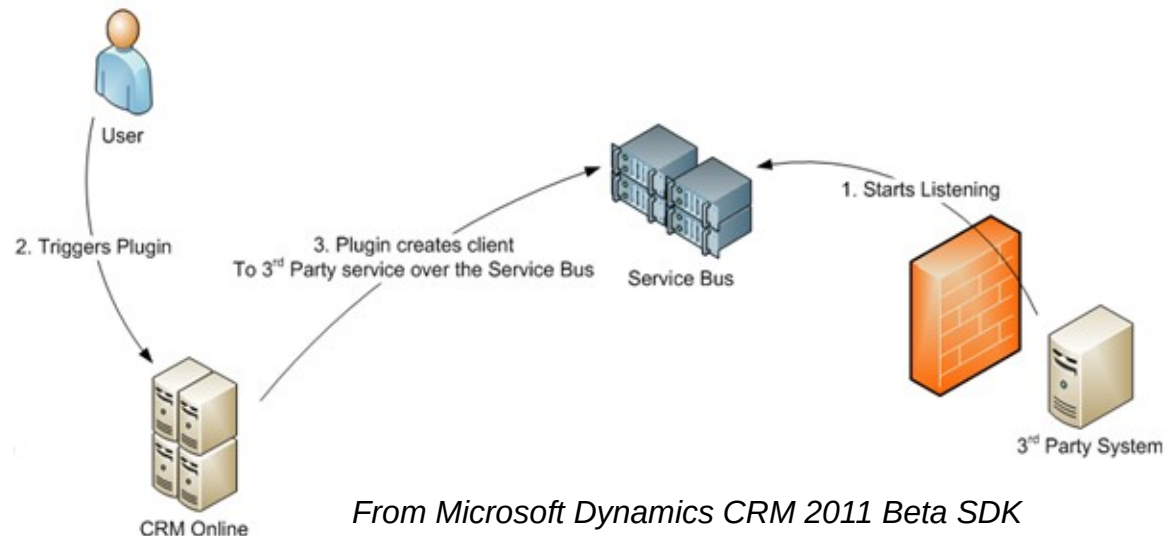
# AppFabric

- Service Bus for messaging between applications
  - Bridges on-premises and cloud applications
  - Exposes applications through corporate firewalls
- Access Control Service for authentication
  - Windows Identity Foundation (WIF) integration
  - Supports OAuth, OpenID, Windows Live ID, Google, Facebook...
  - On-premises requires purchase of a private certificate, Online certificate available from MS



# Integration through Service Bus

- CRM 2011 Online event execution pipeline has been exposed to AppFabric Service Bus
- Allows posting data processed in CRM events to Service Bus through a CRM plug-in
- Can be used for integration scenarios where CRM Online must exchange data with on-premises applications





# Upgrading

# System requirements

- Server
  - Only 64-bit SQL and IIS servers are supported
  - Windows Server 2008, SQL Server 2008
  - Exchange 2003, 2007, 2010, Online (optional)
  - SharePoint 2007, 2010 (optional)
- Client
  - Office 2003 (SP3), 2007, 2010
  - Internet Explorer 7, 8 (Beta does not yet support IE9)
  - 32-bit or 64-bit

# Upgrade paths

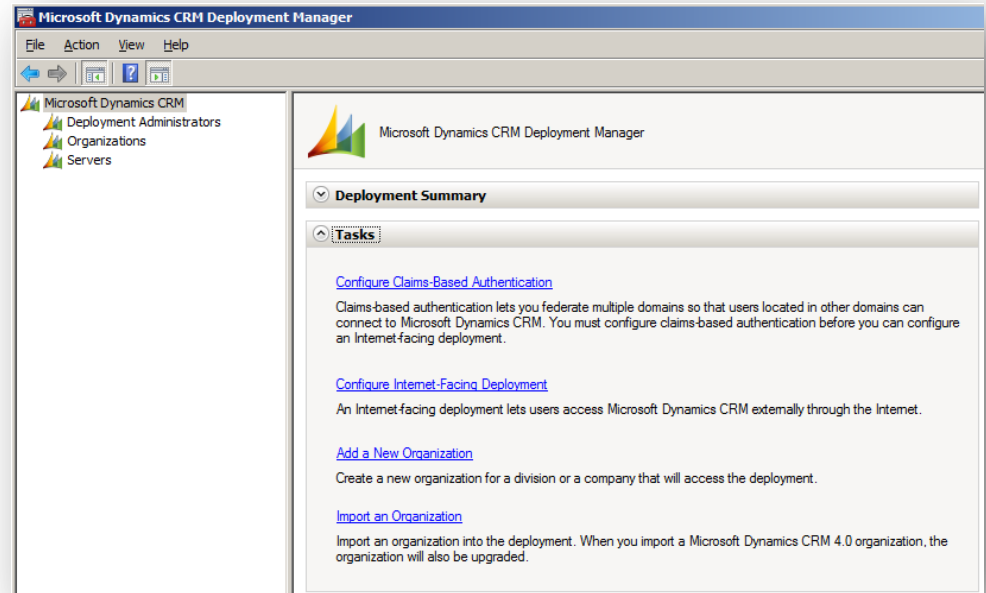
- Migration
  - Recommended option, allows import per organization
  - Old CRM4 instance can remain operational during upgrade
  - Separate SQL Server instances required
- Connect to existing
  - Install new CRM server, upgrade existing SQL database
- In-place
  - Most simple process, but old server environment must meet 2011 requirements
- CRM 3.0 environments must first be upgraded to CRM 4.0 (can use trial version)

# Client upgrade

- CRM 4.0 Outlook clients (UR7+) are compatible with CRM 2011 server
- CRM 2011 clients are NOT compatible with CRM 4.0 server
- New client cannot be pre-deployed, client upgrades to be performed after server upgrade
- CRM 4.0 Offline client changes can be updated to CRM 2011 server, but Go Offline is not available for CRM 4.0 clients after server upgrade

# CRM 4.0 / 2011 customizations

- You can't directly import CRM 4.0 customizations into CRM 2011 system
- However, you can import a CRM 4.0 organization through the Deployment Manager



# Accelerators

- New versions of the accelerators will be released, as stated by Microsoft
- However, unlikely to be available at CRM 2011 RTM/RTW
  - Latest estimate: 6 months after CRM 2011 RTW
- Upgrading an existing CRM 4.0 instance to CRM 2011 with the accelerator components installed may work, but there's no guarantee on functionality

# Virtual machines for CRM 2011

- Everything is x64 now (IIS, SQL) = no more MS Virtual PC or MS Virtual Server images
- Hyper-V is an option if you're running Windows Server 2008 on your PC
- If not, go for Oracle (Sun) VirtualBox
- Creating a virtual machine with VirtualBox:
  - <http://crmscape.blogspot.com/2010/09/creating-ms-crm-2011-vm-part-1-of-2.html>

# Code compatibility



# Web service

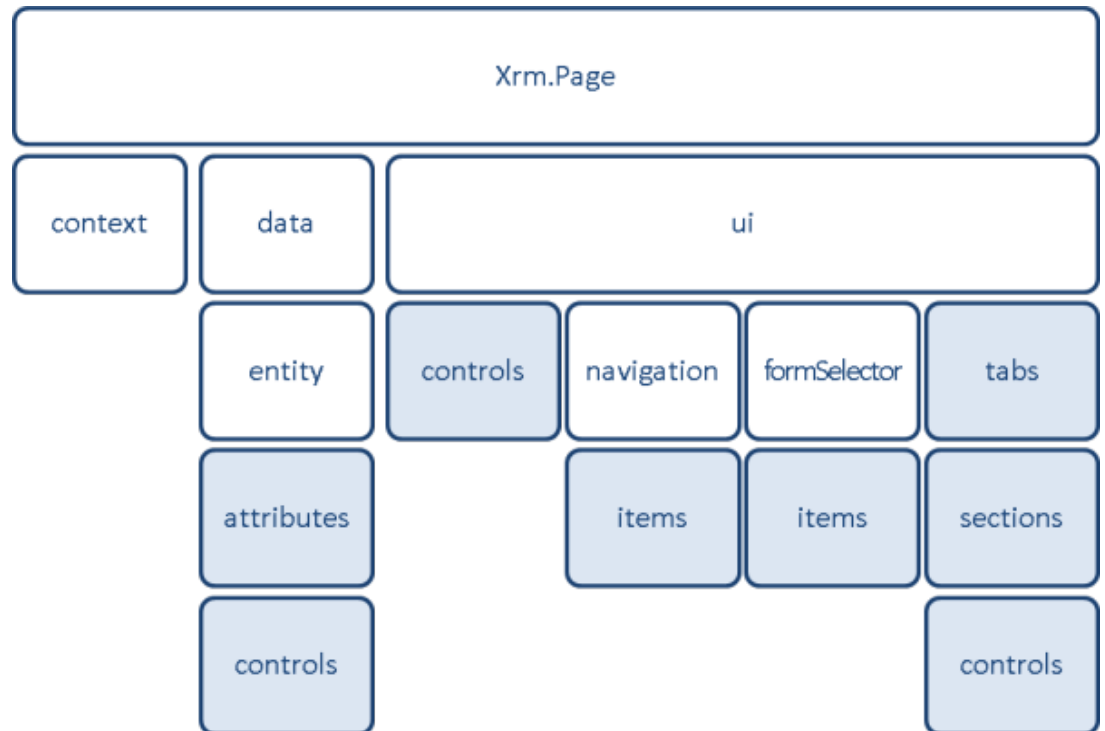
- CRM 4.0 web service endpoint (2007) is supported, CRM 3.0 (2006) is not available
- Web service authentication through WCF

# Plug-ins

- Sandbox (isolation mode) not available for CRM 4.0 plug-ins
- CRM 3.0 plug-ins (callouts) are not supported

# crmForm object is deprecated

- Xrm.Page object is the new namespace
- crmForm backward compatibility but with limited features



*From Microsoft Dynamics CRM 2011 Beta SDK*

# Form scripts

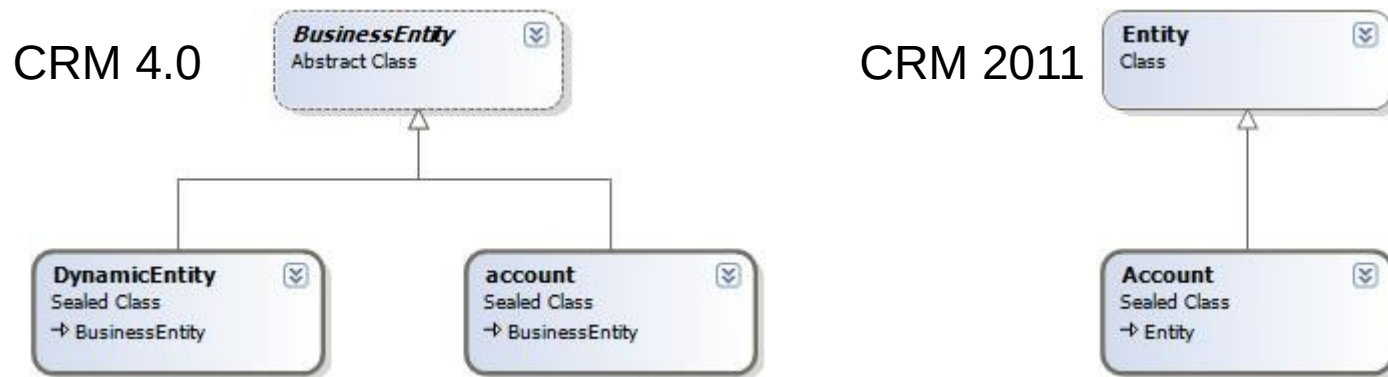
- Changes in the Client API scripting model and namespaces
  - Old: `var AccName = crmForm.all.name.DataValue`
  - New: `var AccName = Xrm.Page.getAttribute("name").getValue()`
- Javascript converter for CRM 4.0 scripts:  
<http://crm2011scriptconvert.codeplex.com/>
- During the upgrade from 4.0, old form scripts will be converted into .js Web Resources

# ISV folder is deprecated

- Calling the 2011 Web services from the <crmwebroot>\ISV folder is no longer supported
- Custom ASPX pages in the ISV folder work after CRM 2011 if they meet the criteria listed in SDK

# No more Dynamic Entity

- Dynamic Entity has been replaced with the base class Entity



From Microsoft Dynamics CRM 2011 Beta SDK

# What's not there

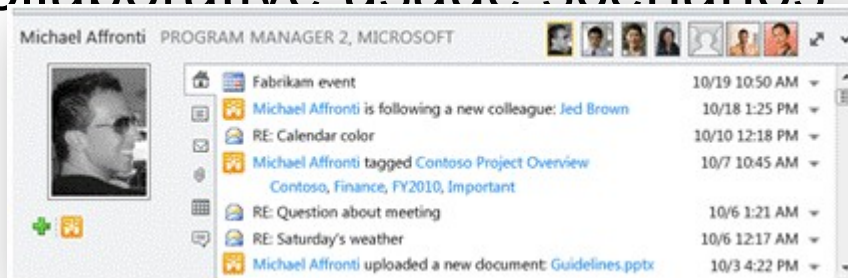
# Search improvements

- No Outlook / Windows Search type of “global search” functionality for searching across different entities
- No “Google style” full text search for using multiple search terms in same search field
- Indexing CRM data with SharePoint through BDC (2007) / BCS (2010) can be used to overcome the search functionality limitations



# Activity streams

- Microblogging á la Yammer or Salesforce.com Chatter is not a Dynamics CRM feature
- SharePoint 2010 activity streams are the closest match in Microsoft's portfolio, integration with CRM data and events could possibly bring more "Enterprise 2.0" flavor to Dynamics CRM in collaborative usage scenarios



Example of microblogging add-on for Dynamics CRM:

[Vibe by Sonoma Partners](#)

# Social media integration

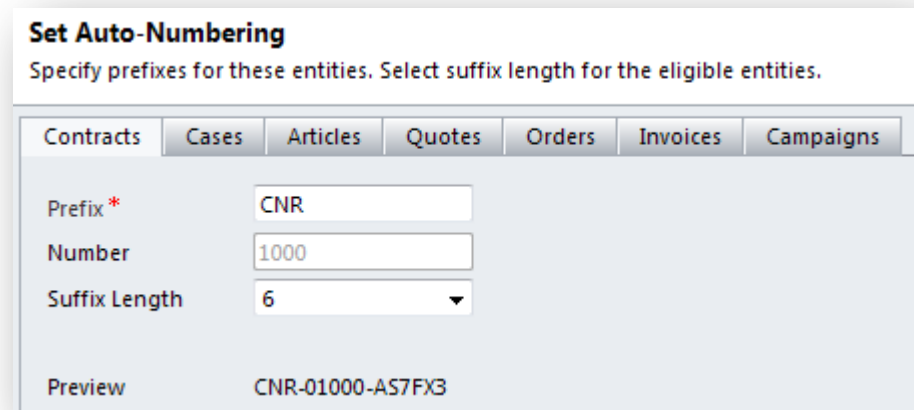
- Social CRM is a huge trend, but Microsoft has not included out-of-the-box connectivity to any social networks in Dynamics CRM 2011
- Outlook Social Connector does integrate with CRM Outlook client reading panes, but the data is purely inside the Outlook client, not trackable to the CRM database
- Updated Accelerators expected, will offer some level of social media integration
  - Current CRM 4.0 Accelerator was not updated after Twitter switched to OAuth in August...

# Customer fields

- You can't create a Customer field that would act in the same way as the fields on default entities like opportunities etc.
- However, creating a new custom activity entity automatically adds such a field
- Currently there is no supported way for limiting the existing customer fields' entity types or setting defaults on the OOB entities
  - 4.0 scripts not compatible in 2011

# Auto-numbering

- Custom solutions still needed for providing numbering on most entities, such as accounts
- Open source solutions may emerge quickly, as this is such a common requirement & readily available in competing CRM products
- BTW: no calculated fields in CRM 2011 either

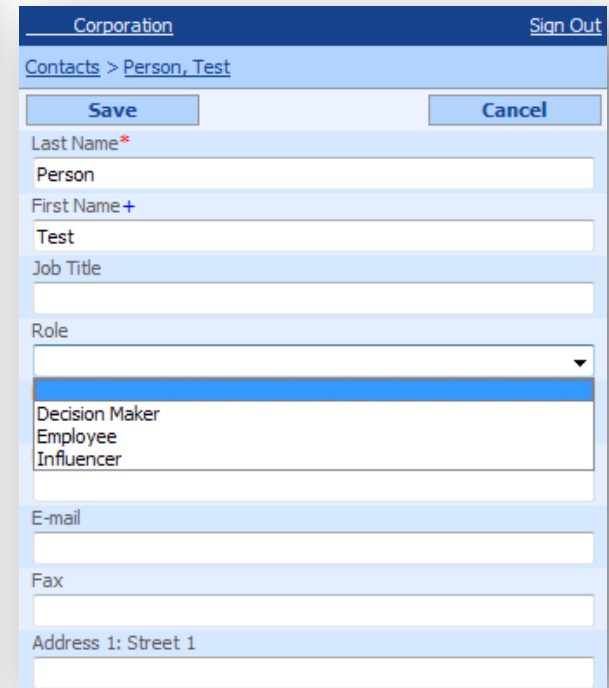


The screenshot shows the 'Set Auto-Numbering' dialog box. At the top, it says 'Set Auto-Numbering' and 'Specify prefixes for these entities. Select suffix length for the eligible entities.' Below this is a tabbed interface with tabs for 'Contracts', 'Cases', 'Articles', 'Quotes', 'Orders', 'Invoices', and 'Campaigns'. The 'Contracts' tab is selected. In the main area, there are three input fields: 'Prefix\*' with the value 'CNR', 'Number' with the value '1000', and 'Suffix Length' with a dropdown menu showing '6'. At the bottom, there is a 'Preview' section showing the resulting auto-number 'CNR-01000-AS7FX3'.

| Set Auto-Numbering   |                  |
|--|------------------|
| Specify prefixes for these entities. Select suffix length for the eligible entities. |                  |
| <div>Contracts Cases Articles Quotes Orders Invoices Campaigns</div>                 |                  |
| Prefix*  | CNR              |
| Number   | 1000             |
| Suffix Length  | 6                |
| Preview  | CNR-01000-AS7FX3 |

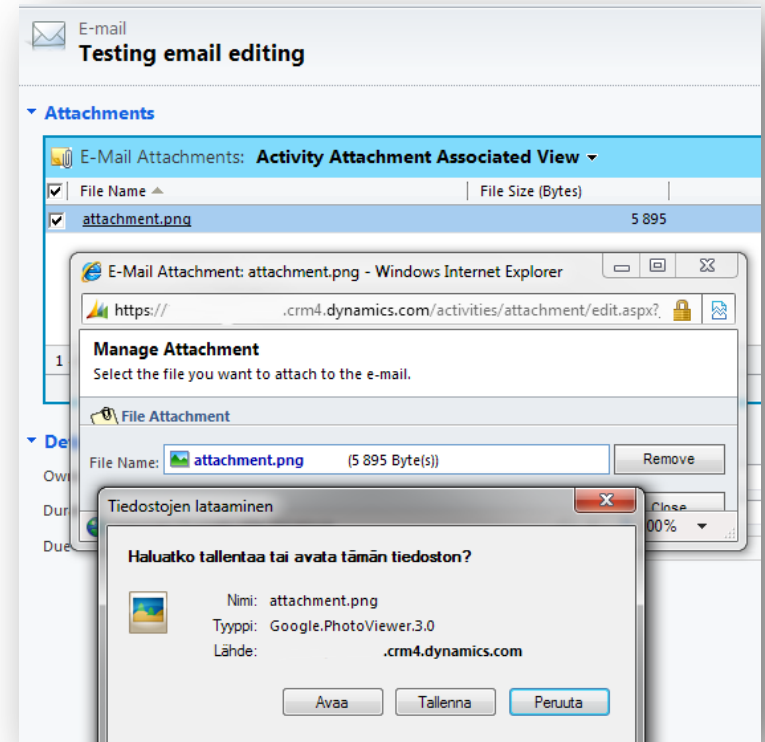
# Mobile client enhancements

- As of CRM 2011 Beta, the Mobile Express client appears to have the exact same functionality as before
- Windows Phone 7 integration with CRM Online is expected to be announced, other platforms may need to rely on ISV client applications



# Email editor enhancements

- As of CRM 2011 Beta, email editing experience in the web client remains the same as CRM 4.0
- No spell checker, user signatures, multiple attachment selection, attachment preview



# Hyperlinks in workflow emails

- Feature for including hyperlinks to regarding records in workflow email body text was dropped from CRM 2011
- Custom workflow activities need to be developed for achieving the hyperlinking feature in workflows
  - However, CRM Online will not support custom workflow activities
- Other workarounds known previously, like storing GUID's into entity attributes, can still be utilized

# Follow-up activities

- As a result of the deprecation of form assistant, there is no longer a built-in functionality for creating a follow-up activity
- Custom solution could be built with the new Process Dialogs
- However, since Dialogs don't support many field types (such as datetime), implementing identical functionality may be difficult



Thanks for viewing!

Working with Microsoft Dynamics CRM, day in day out

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Who is Jukka Niiranen?

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## Outlook 2007 with Dynamics CRM 2011: will it blend?

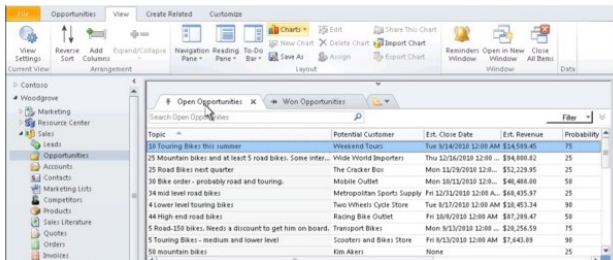
2 comments

Posted on 16th September 2010 by Jukka Niiranen in Features

CRM 2011, Office, Outlook, UI

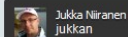
Perhaps the most visible improvement in Microsoft Dynamics CRM 2011 for the end user is the completely revamped Outlook client. Instead of merely wrapping the CRM web client UI inside the Outlook frame with stripped navigation and giving you the all important tracking buttons, the new Outlook client promises additional usability features over the web client. In the demos we've seen, things certainly do look pretty with Outlook 2010, but one question remains: will it blend with the previous versions of Outlook?

Here's a reminder of what Dynamics CRM 2011 Outlook client delivers with Outlook 2010:



## About this site

I'm a Microsoft Dynamics CRM specialist from Finland, having worked with the system since 2005. Occasionally when I have a thing to say about the topic, I may post it on my CRM blog, tweet it, save it to CRM links or bookmark it on Delicious.



Jukka Niiranen  
jukkan

Amazon UK starts free shipping Finland, 2 weeks after I made p my last physical Amazon order e (Kindle) <http://bit.ly/9cKkGx> 20 hours ago

Lotus Notes is in the cloud now <http://www.to/tpt/OF> But can the stop hating it after all these year <http://lotusnotesucks.4...> yesterday

Microsoft BPOS waiting for Exch 2010 update over a year now, CRM 2011 should launch Online on-premises. Hmm... #MSDYNCRM 2 days ago

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Microsoft BPOS waiting for Exchange 2010 update over a year now, whereas CRM 2011 should launch Online before on-premises.

Hmm... #MSDYNCRM

from Eteläinen, Helsinki

10 Oct



jukkan Jukka Niiranen

Video of MS CRM 2011 Online reporting features: <http://t.co/ZzoJ5mN> Includes FetchXML export to VS, embedding RDLs to dashboards #MSDYNCRM

9 Oct



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Finally! Dynamics CRM 2011 now displays the total number of records in the view ("1-50 of 99") #MSDYNCRM #CRM2011

<http://yfrog.com/6z7oup>

6 Oct



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Date fields not supported in Dynamics CRM 2011 process dialogs: <http://bit.ly/crM9cl> - Well, there goes my use cases then #MSDYNCRM #CRM2011

5 Oct

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